# 지배기구와 외부감사인 간의 커뮤니케이션이 외국인지분율에 미치는 영향 The Effect of Communication between Those Charged with Governance and External Auditors on Foreign Ownership<sup>\*</sup>

정현욱(주저자) · 변선영(교신저자) Hyun Uk Jung(First Author) · Sun Young Byun(Corresponding Author)

동아대학교 경영학과 Dong-A University, Department of Business Administration(*biglotos@dau.ac.kr*) 동아대학교 국제무역학과 Dong-A University, Department of International Trade(*byeunsy@dau.ac.kr*)

.....

We test the effect of communication between those charged with governance and external auditors on foreign ownership. We establish two hypotheses based on research results showing that domestic foreign investors prefer high audit quality when selecting investment companies. The test results show that the number of communications between the internal audit organization and external auditors have a positive relationship with foreign ownership. The number of communications between internal auditors and external auditors is found to further increase the positive relationship between audit quality and foreign ownership. We divide communication into face-to-face and non-face-to-face and additionally tested how each communication method is related to foreign ownership. This study is expected to have policy implications in that it presents the results that disclosure about communication between those charged with governance and external auditors has an effect on those charged with governance. In other words, this study is expected to have a contribution in that it presents empirical data showing that the introduction of the 'Revised External Audit Law' can change the governance structure.

Keyword: Those Charged with Governance, External Auditor, Foreign Ownership, Internal Audit Organization, Audit Quality

.....

# I. Introduction

The purpose of this study is to analyze the effect of communication between those charged with governance and external auditors on foreign ownership. This study establishes two hypotheses and performs empirical analysis.

This study hypothesizes that the number of communications between those charged with governance and external auditors (hereinafter 'CTCGEA') would have a positive (+) relation

Submission Date: 07. 15. 2024Revised Date: (1st: 11. 12. 2024)Accepted Date: 11. 25. 2024\* This work is supported by the Dong-A University Research fund.Accepted Date: 11. 25. 2024

Copyright 2025 THE KOREAN ACADEMIC SOCIETY OF BUSINESS ADMINISTRATION

This is an open access article distributed under the terms of the Creative Commons Attribution License 4.0, which permits unrestricted, distribution, and reproduction in any medium, provided the original work is properly cited. with foreign ownership, and that the number of CTCGEA would have a positive (+) relationship between audit quality and foreign ownership. Hypothesis 2 is established that the relevance of will increase. The hypothesis of this study is based on the results of Kim & Kim(2020) and Hong et al.(2022) that CTCGEA acts as a factor that increases audit quality.

Studies related to domestic foreign investors show that foreign investors' preference increases for companies that have high-audit quality, high-quality of earnings, excellent governance, and pay high dividends(Baek & Moon, 2010; Cheon, 2003; Lee & Kim, 2012; Lee & Rho, 2006; Kim & Jang, 2012). However, foreign investors appear to have a low preference for companies with high information asymmetry(Ahn et al., 2005).

The 'Revised New External Audit Law (effective in November 2018)' stipulates that CTCGEA must be disclosed separately in writing and in person. Therefore, recent research on CTCGEA is analyzing how CTCGEA relates to accounting information.

Empirical test results show that CTCGEA acts as an incentive to improve audit quality (Kim & Kim, 2020; Hong et al., 2022). Therefore, active-communication between those charged with governance and external auditors appears to lower the level of earnings management and increase the quality of financial information (quality of earnings) and the information effect of earnings (earnings response coefficient) (Kim & Hong, 2021; Shim et al., 2021; Read & Raghunandan, 2001).

As in the above studies, research related to CTCGEA is actively conducted to test the effect of communication on accounting information, but research to test the effect of communication on governance is not active. Considering the results of Baek & Moon(2010) that domestic foreign investors select investment companies by considering audit quality, CTCGEA is expected to have an effect on foreign ownership. Based on these expectations, this study sought to test the relationship between CTCGEA and foreign ownership.

In the empirical test, average foreign ownership is used, and those charged with governance are measured by internal audit organization. The test results indicate that the increase in the number of communications between those charged with governance and external auditors is increasing foreign ownership. This can be interpreted as active communication between the internal audit organization and external auditors acting as an incentive to increase audit quality, resulting in an increase in foreign ownership.

In particular, the regression sign of the interaction variables (communication between those charged with governance and external auditors×audit quality) used to test Hypothesis 2 show a significant positive (+) sign. According to these results, the number of communications between internal audit organization and external auditors can be interpreted as further increasing the positive relationship between audit quality and foreign ownership.

As an additional test, this study divides communication frequency into face-to-face communication and non-face-to-face communication to test the effect of communication method on foreign ownership. The test results show that the number of face-to-face communications has a positive relationship with foreign ownership. However, the number of nonface-to-face communications is found to be unrelated to foreign ownership. Based on these results, the main result of the positive relationship between communication between internal audit organization and external auditors and foreign ownership is believed to be due to the effect of face-to-face communication.

The results of testing the additional effect of communication method on the relationship between audit quality and foreign ownership show that the number of face-to-face communications further increases the positive relationship between audit quality and foreign ownership. However, the number of non-faceto-face communications is found to decrease the positive relationship between audit quality and foreign ownership. The results of these additional tests suggest that the effect of audit quality on foreign ownership differs systematically depending on the communication method.

External auditors must be competent and

independent in providing audit services. Investors may perceive frequent meetings between the audited entity and external auditors as a signal of securing the reliability of the audited entity's accounting information, but they may also perceive it as a signal of undermining the independence of the external auditor. Meanwhile, foreign investors are generally known to have better information capabilities than domestic investors. In this regard, this study has policy implications in that it suggests that foreign investors positively evaluate active communication between those charged with governance and external auditors and reflect it in their investment decisions.

This study tests the effect of the introduction of the 'Revised New External Audit Law (effective in November 2018)', which requires separate disclosure of CTCGEA in writing and face-to-face, from the aspect of corporate governance. It is expected that there will be policy implications. In other words, this study is expected to have a contribution in that it presents empirical data showing that the introduction of the 'Revised New External Audit Law' can change governance structure.

Chapter II of this study describes the review of previous research and the setting of hypotheses. Chapter III describes the research model and sample selection process. Chapter IV describes the results of the empirical test, and Chapter V describes the conclusion.

# II. Review of previous research and Hypothesis setting

### 2.1 Factors that influence the decision-making of domestic-foreign investors

Studies related to foreign ownership report that foreign investors who have made investment decisions in Korea consider factors such as audit quality, reliability of accounting information, corporate governance, and dividends when selecting companies for investment(Baek & Moon, 2010, Cheon, 2003; Lee & Kim, 2012; Lee & Rho, 2006; Kim & Jang, 2012). First, a study that tests the effect of audit quality on foreign ownership is conducted by Baek & Moon(2010).

Baek & Moon(2010) test the effect of audit quality on foreign ownership by measuring audit quality with audit hours, audit fees, and auditor size. As a result of the test, audit hours, audit fees, and auditor size are found to have a positive relationship with foreign ownership. Baek & Moon(2010) interpret these results as saying that domestic foreign investors select investment target companies by considering their audit quality.

Goh et al.(2009) explain that high audit quality increases the reliability of accounting information. When connected with the results of Baek & Moon(2010), this suggests that domestic foreign investors prefer companies with highly reliable accounting information.

In this context, Cheon(2003) presents results showing that domestic foreign investors prefer companies with high quality of earnings. And Lee & Kim(2006) present the results that high discretionary accruals reduce foreign ownership. They explain that quality of earnings has an effect on the decision-making of domestic foreign investors.

According to Moon et al.(2006), it is reported that a good governance increases the quality of earnings. This suggests that foreign investors may be more likely to prefer companies with excellent governance structures. Therefore, Ko et al.(2012) tests the effect of governance structure on foreign ownership by measuring the characteristics of the audit committee and the board of directors as proxy variables for governance structure.

As a result of the test, the establishment of an audit committee, independence of the audit committee, and independence of the board of directors, measured as proxy variables for governance, are found to have a positive relationship with foreign ownership. Regarding these results, Ko et al.(2012) explain that excellent corporate governance is a positive factor in the decision-making of foreign investors in Korea.

Jung et al.(2014) present results showing that foreign investors who have made investment decisions in Korea prefer dividend income over capital gains. Jung et al.(2014) explain that this result occurs because both capital gains and dividend income are subject to taxation in Korea.

Lee & Rho(2006) report results showing that there is a positive relationship between dividend rate and foreign ownership. Sul & Kang(2006) report that foreign investors owning more than 5% of shares prefer companies with high dividend payout ratio and dividend yield. And Kim & Jang(2012) report that foreign ownership has a positive relationship with the dividend level. According to these results, it can be interpreted that domestic foreign investors prefer companies that pay high dividends.

Dividends are paid through the disposal of retained earnings. And retained earnings are determined by net income. In this case, the research results showing that domestic foreign investors prefer high dividend stocks indicate that there can be a positive relationship between foreign ownership and net income.

Applying this logic, Jung & Lee(2016) found that companies with a high degree of competition in the product market have a high incentive to report low net income, so there is a negative relationship between the degree of competition in the product market and foreign ownership. They are reporting that they have it. Park & Hong(2009) report that since high tax avoidance is an incentive to increase net income, an increase in tax avoidance leads to an increase in foreign ownership.

# 2.2 Research related to Communication between Those Charged with Governance and External Auditors(CTCGEA)

A study that tests CTCGEA examines the effect of the frequency of CTCGEA on audit quality, earnings management, quality of financial reporting (quality of earnings), and information effectiveness of earnings. We are testing whether it is going crazy (Kim & Kim, 2020: Kim & Hong, 2021; Shim et al., 2021: Hong & Kim, 2021: Hong et al., 2022; Read & Raghunandan, 2001: Cohen et al., 2008). First, Hong et al.(2022) and Kim & Kim(2020) test the relationship between CTCGEA and audit quality.

They are all measuring those charged with governance by the audit committee. And Hong et al.(2022) measure audit quality by audit hours, and Kim & Kim(2020) measure audit quality by discretionary accruals.

According to the test results, Hong et al. (2022) present the results that active communication increases audit hours and audit fees, and Kim & Kim(2020) present the results that high communication frequency reduces discretionary accruals. Based on these results, they explain that active CTCGEA is an incentive to increase audit quality.

High audit quality is a factor that lowers managers' incentives to conduct earnings management (Choi, 2006; Kwon & Ki, 2011). In this context, Shim et al.(2021) report that CTCGEA has a negative relationship with earnings management because active communication between those charged with governance and external auditors serves as an incentive to increase audit quality.

A low level of earnings management increases the quality of financial (accounting) information (quality of earnings) (Shin et al., 2012; Kim & Ko, 2011). This suggests that close communication between those charged with governance and external auditors can improve the quality of financial information.

According to test results related to this, Cohen et al.(2008) report that active communication between external auditors and management (or audit committee) increases the quality of financial information. This is also shown in the study by Read & Raghunandan (2001).

Read & Raghunandan(2001), using a survey method, present results showing that active communication between external auditors and the audit committee has a positive effect on the quality of financial reporting. These results are found to be consistent in Hong & Kim(2021), which tested domestic companies.

Hong & Kim(2021) measure those charged with governance as an internal audit organization and test how the frequency of CTCGEA affects the quality of earnings. As a result of the test, CTCGEA is found to have a positive relationship with quality of earnings. Lev & Thiagarajan(1993) report that high quality of earnings increases earnings response coefficient (ERC). This suggests that CTCGEA can increase the information effect of earnings. Empirical test results also show that CTCGEA increases the profit response coefficient (Kim & Hong, 2021). This suggests that active communication between those charged with governance and external auditors can be a positive factor in the information effect of earnings.

In addition, Lee et al.(2021) report that an increase in CTCGEA reduces the possibility of breach of trust and embezzlement. Cohen et al.(2002) explain that active communication between those charged with governance (management or audit committee) and external auditors reduces the likelihood of fraud occurring.

#### 2.3 Setting the hypothesis

Hong et al.(2022) and Kim & Kim(2020) report that high CTCGEA increases audit quality. Baek & Moon(2010) present results showing that domestic foreign investors have a high preference for companies with high audit quality. In this case, foreign investors' preference is expected to increase for companies with high CTCGEA frequency.

Choi(2006) and Kwon & Ki(2011) explain that high audit quality can act as an incentive to improve the quality of financial reporting by lowering the incentive for managers to manage earnings. Consistent with this result, Shim et al.(2021) present the result that active communication between those charged with governance and external auditors improves audit quality, thereby reducing managers' discretionary earnings management. This suggests that high communication between those charged with governance and external auditors can improve the quality of financial reporting. This result is also consistent with Read and Raghunandan(2001) and Hong & Kim(2021).

Cheon(2003) and Lee & Kim(2012) presented the results that domestic foreign investors prefer high quality of financial reporting. This suggests that frequent communication between those charged with governance and external auditors improves audit quality, and this improvement in audit quality ultimately acts as an incentive to improve the quality of financial reporting. In this case, it is expected that domestic foreign investors prefer high communication between those charged with governance and external auditors. Therefore, this study sets the following hypothesis 1.

Hypothesis 1: The number of times communication between those charged with governance and external auditors will have a positive relationship with foreign ownership.

Park et al.(2011) explain that the audit quality of big4 is higher than that of nonbig4. Baek & Moon(2010) present results showing that foreign ownership increases when Big4 performs audits. This is also found to be consistent in Jung & Cho(2018). They interpret this result as the fact that domestic foreign investors prefer high audit quality.

Studies related to CTCGEA in Korea consistently show that there is a positive relationship between the number of CTCGEAs and audit quality (Kim & Kim, 2020: Hong et al., 2022).<sup>1)</sup> This suggests that CTCGEA can act as an incentive to increase the positive relationship between audit quality and foreign ownership. In this regard, this study establishes Hypothesis 2 below.

Hypothesis 2: The number of communications between those charged with governance and external auditors will increase the positive relationship between audit quality and foreign ownership.

<sup>1)</sup> Hwang et al.(2009) explained that auditors provide different audit services depending on the size of the company. Hwang et al.(2009) explained that for large corporations with more than 500 billion won in assets. Big 4 auditors provide higher audit quality than non-Big 4 auditors. However, Hwang et al.(2009) explained that for small and medium-sized companies, it is difficult to receive compensation equivalent to the audit hours, so it is difficult to maintain high audit quality. Due to this incentive, Hwang et al.(2008) explained that for small and medium-sized companies, it is easier to approach non-Big 4 than Big 4. In other words, Hwang et al.(2008) explained that for small and medium-sized companies, non-Big 4 contributes more to the accounting transparency of the company than Big 4. The audit committee is an internal audit organization to strengthen internal control. Article 542-11 of the Commercial Act requires listed companies with total assets of 2 trillion won or more to establish an audit committee. In this regard, this study attempted to measure audit quality by big4 and non-big4.

### III. Research methodology

#### 3.1 Research model

This study establishes equations (1) and (2) below to test hypotheses 1 and 2. Equation (1) is a model for testing hypothesis 1, and equation (2) is a model for testing hypothesis 2.

$$For_{i,t} = \beta_0 + \beta_1 Comm_{i,t} + \beta_2 Div_{i,t} + \beta_3 Smo_{i,t} + \beta_4 Esg_{i,t} + \beta_5 Vol_{i,t} + \beta_6 Big4_{i,t} + \beta_7 Lev_{i,t} + \beta_8 Roa_{i,t} + \beta_9 Cfo_{i,t} + \beta_{10} Ind + \beta_{11} Yd + \epsilon$$
(1)

$$For_{i,t} = \beta_0 + \beta_1 Comm_{i,t} + \beta_2 Comm_{i,t} \times Big4_{i,t} + \beta_3 Div_{i,t} + \beta_4 Smo_{i,t} + \beta_5 Esg_{i,t} + \beta_6 Vol_{i,t} + \beta_7 Big4_{i,t} + \beta_8 Le v_{i,t} + \beta_9 Roa_{i,t} + \beta_{10} Cfo_{i,t} + \beta_{11} Ind + \beta_{12} Yd + \epsilon$$
(2)

For : Average foreign ownership Comm

Comm1 : Number of communications between the internal audit organization and external auditors

Comm2 : ln(Comm1 + 1(one))

Div : Cash dividend (1 if cash dividend is paid, 0 otherwise)
Smo : Earnings smoothing((net income standard deviation (5 years)/operating cash flow

standard deviation (5 years))×(-1)) Esg : ESG index

- Vol : Information asymmetry (standard deviation of annual daily stock returns)
- Big4 : Audit quality (1 if the audit is performed

by big4, 0 otherwise)

Lev	: Debt ratio (total liabilities <sub>t</sub> /total assets <sub>t</sub> )
Roa	: Return on assets(Income before income
	$tax \ expenses_t/total \ assets_t)$
Cfo	: Cash flow from operating activities
	(operating cash flow_t/total assets_t)
Ind	: Industrial dummy
Yd	: Year dummy

As presented in equations (1) and (2) above, this study measures those charged with governance as an internal audit organization. In other words, Comm1 and Comm2 in equations (1) and (2) are based on the number of communications between the internal audit organization and external auditors.

In this case,  $\beta_1$  in equation (1) becomes the verification coefficient for hypothesis 1. To be consistent with this hypothesis in equation (1), it must show a significant positive (+) sign. If  $\beta_1$  of equation (1) shows this significant positive sign, high CTCGEA can be interpreted as increasing foreign ownership.

 $\beta_2$  in equation (2) is the verification coefficient for hypothesis 2, and in order for  $\beta_2$ of equation (2) to be consistent with the hypothesis, it must show a significant positive (+) sign. If  $\beta_2$  in equation (2) presents a significant positive (+) sign, it indicates that CTCGEA can be a factor that increases the positive (+) relationship between audit quality and foreign ownership.

The control variables include in equations (1) and (2) are as follows. Div is intended to

control the effect of dividends on foreign investors' decision-making(Jung, 2014; Lee & Rho, 2006; Shin & Jeong, 2007).

Cheon(2003) reports that domestic foreign investors prefer highly reliable accounting information. From this perspective, Jung(2015) reports that high earnings smoothing increases foreign ownership. Therefore, Smo is included in the model to control the effect of earnings smoothing on foreign ownership.

Yoon & Kim(2022) report that ESG level has a positive relationship with foreign ownership. This study includes ESG in the model to control the effect of ESG activities on foreign investors' decision-making.

Ahn et al.(2005) say that foreign investors prefer low information risk. Therefore, Vol is intended to control the effect of information risk on foreign ownership. Baek & Moon(2010) explain that foreign investors prefer high audit quality. In this respect, Big4 is intended to control the effect of audit quality on foreign ownership.

Jung & Lee(2014) report that debt ratio is a variable indicating financial risk and has a negative relationship with foreign ownership. This study attempts to control the effect of debt ratio on foreign investors' decision-making by including Lev in the model.

Kang & Stulz(1997) and Jung et al.(2023) explain that foreign investors prefer high profitability and abundant operating cash flow. In this regard, this study measures Roa and Cfo as proxy variables for profitability and operating cash flow and include these variables in the model. And Ind and Yd include in the model are to control the effects of industry and year.

#### 3.2 Selection of sample

Since the 'Revised New External Audit Law' is implemented in November 2018, we select a sample of KOSPI listed companies from 2019 to 2021 that met the following conditions.

- Companies that can collect average (common stock) foreign ownership, financial data (including stock price data), and audit firm data from 2015 to 2021 from NICE Information Service Inc.'s Kis-Value.
- (2) Companies that disclose the number of communication between internal audit organizations and external auditors in business reports (provided by Data Analysis, Retrieval and Transfer System).
- (3) Companies that disclose ESG index at Korea Institute of Corporate Governance and Sustainability.
- (4) Fiscal year (December), unmodified audit opinion and non-impaired capital companies.

The number of companies that met all of the above conditions is 1,965 (company-year).

(Table 1) Distribution by year

	2019	2020	2021	Total
total	662	652	651	1,965

And (Table 1) is the distribution by year for 1,965 (company-year) companies. Specifically, in 2019 and 2020, the number of samples is 662 (company-year) and 652 (company-year). For 2021, the number of samples is 651 (company-year). And the number of samples in this study is evenly distributed by year.

# IV. Empirical test

#### 4.1 Descriptive statistics and correlation test

 $\langle$ Table 2 $\rangle$  shows the descriptive statistics of the variables. The mean (median) and standard deviation of For are 0.1019 (0.0516) and 0.1249. In the case of Jung et al. (2023), the mean (median) is reported as 0.1052 (0.0487) and the standard deviation is reported as 0.1341. For in this study shows a similar distribution to Jung et al. (2023).

The mean (median) of Comm1 and Comm2 is 3.6397 (3.0000) and 1.3910 (1.3863). This study measures Comm using the methodology of Jung & Byun(2024). Jung & Byun(2024) report the mean (median) of Comm1 and Comm2 as 3.5890 (3.0000) and 1.3815 (1.3863). The Comm distribution appears to be similar to that of Jung & Byun(2024).

The mean(median) of Div is 0.7013(1.0000), and the mean(median) of Smo is -1.5880(-0.9923). The mean(median) of Esg is 0.2697(0.0000), and the mean(median) of Vol is 0.0269(0.0245). Big4's mean(median) is found to be 0.5598(1.0000), and Lev's mean (median) is found to be 0.3919(0.3951). And the mean (median) of Roa and Cfo is 0.0183(0.0251) and 0.0439 (0.0436), respectively.

(Table 3) shows the results of the correlation (Pearson) between variables. For is found to have a significant correlation with Comm1 and Comm2, which indicates the number of CTCGEA cases. Although this is not a result that takes direction into account, it suggests that foreign ownership may increase if the number of communications between those charged with governance and internal auditors increases.

In the case of For, it is found to have a positive (+) correlation with Div, Smo, Esg, Big4, Roa, and Cfo. However, For is found to have a negative correlation with Lev. As the correlation between specific variables is found to be significant, this study additionally checks the variance inflation factor (VIF). As a result, the VIF value is found to be 1.43, which

	mean	Standard Deviation	Min	25%	median	75%	Max
For	0.1019	0.1249	0.0002	0.0209	0.0516	0.1332	0.7923
Comm1	3.6397	2.4554	0.0000	2.0000	3.0000	5.0000	20.0000
Comm2	1.3910	0.5732	0.0000	1.0986	1.3863	1.7918	3.0445
Div	0.7013	0.4578	0.0000	0.0000	1.0000	1.0000	1.0000
Smo	-1.5880	2.3515	-29.0327	-1.6538	-0.9923	-0.5509	-0.0409
Esg	0.2697	0.7840	0.0000	0.0000	0.0000	0.0000	5.0000
Vol	0.0269	0.0115	0.0077	0.0185	0.0245	0.0328	0.0972
Big4	0.5598	0.4965	0.0000	0.0000	1.0000	1.0000	1.0000
Lev	0.3919	0.2108	0.0006	0.2077	0.3951	0.5405	0.9800
Roa	0.0183	0.1040	-1.6618	-0.0020	0.0251	0.0596	0.4928
Cfo	0.0439	0.0800	-0.4820	0.0072	0.0436	0.0865	0.8569

(Table 2) Descriptive statistics

Definition of variable: For = average foreign ownership: Comm1 = Number of communications between the internal audit organization and external auditors: Comm2 =  $\ln(Comm1 + 1(one))$ : Div = Cash dividend (1 if cash dividend is paid, 0 otherwise): Smo = earnings smoothing((net income standard deviation (5 years)/operating cash flow standard deviation (5 years))×(-1)): Esg = ESG index: Vol = Information asymmetry (standard deviation of annual daily stock returns): Big4 = audit quality (1 if the audit is performed by big4, 0 otherwise): Lev = Debt ratio (total liabilitiest/total assetst): Roa = Return on assets(Income before income tax expensest/ total assetst): Cfo = Cash flow from operating activities (operating cash flowt/total assetst).

	For	Comm1	Comm2	Div	Smo	Esg	Vol	Big4	Lev	Roa
Comm1	0.2211***									
Comm2	0.1951***	0.8984***								
Div	0.2287***	0.1121***	0.1363***							
Smo	0.0565**	-0.0064	-0.0169	0.0926***						
Esg	0.0484**	0.0529**	0.0525**	0.0671***	0.0028					
Vol	-0.2746***	-0.1069***	-0.0819***	-0.3352***	-0.0885***	-0.0431*				
Big4	0.3004***	0.2486***	0.2157***	0.2052***	0.0653***	0.0763***	-0.2504***			
Lev	-0.1255***	0.0289	0.0149	-0.2978***	0.0923***	-0.0639***	0.1533***	0.0083		
Roa	0.1912***	0.0672***	0.0783***	0.4242***	0.0469**	0.0566**	-0.2115***	0.1085***	-0.2669***	
Cfo	0.2154***	0.0455**	0.0454**	0.2759***	0.1063***	0.0578**	-0.1600***	0.1552***	-0.0764***	0.4149***

(Table 3) Correlation test results

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables is described in  $\langle {\rm Table}~2\rangle.$ 

indicates that the problem of multicollinearity is not serious.

#### 4.2 Result of hypothesis test

 $\langle \text{Table 4} \rangle$  is the result of testing hypothesis 1, and  $\langle \text{Table 5} \rangle$  is the result of testing hypothesis 2. Specifically, Model 1 in  $\langle \text{Table 4} \rangle$ and  $\langle \text{Table 5} \rangle$  is tested by measuring CTCGEA with Comm1, and Model 2 is tested by measuring CTCGEA with Comm2.

First, the regression signs of Comm1 and Comm2 in  $\langle$ Table 4 $\rangle$  present significant positive (+) signs in all models. This is a result consistent with the hypothesis, indicating that the number of CTCGEAs has a positive (+) relationship with foreign ownership. In other words, this shows that domestic foreign investors prefer companies with active CTCGEA when selecting companies for investment.

The regression signs of Comm1×Big4 and Comm2×Big4 in (Table 5) present significant positive (+) signs in all models. This suggests that active communication between those charged with governance and external auditors is acting as a factor in increasing the positive relationship between audit quality and foreign ownership.

The Div regression sign shows a significant positive (+) sign in all models in  $\langle \text{Table } 4 \rangle$ 

	Model	1(For)	Model 2	2(For)	
	Coefficient t-v		Coefficient	t-value	
Intercept	0.0410	1.22***	0.0274	0.81***	
Comm1	0.0081	7.24***			
Comm2			0.0298	6.21***	
Div	0.0174	2.62***	0.0164	2.47***	
Smo	0.0008	0.70	0.0008	0.73	
Esg	0.0033	0.99	0.0033	1.00	
Vol	-1.7258	-6.87***	-1.7811	-7.07***	
Big4	0.0484	8.75***	0.0507	9.20***	
Lev	-0.0511	-3.69***	-0.0504	-3.63***	
Roa	0.0566	1.91*	0.0554	1.86*	
Cfo	0.1301	3.60***	0.1308	3.61***	
Ind	Inclu	ıded	Inclu	ded	
Yd	Inclu	ıded	Inclu	ded	
F-value	22.5	6***	21.86***		
$\mathrm{Adj.R}^2$	0.2	154	0.20	98	

(Table 4) Relationship between CTCGEA and foreign ownership (results for Hypothesis 1)

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables is described in  $\langle Table 2 \rangle$ .

and  $\langle \text{Table 5} \rangle$ , showing that it is consistent with the expected sign. This can be interpreted that domestic foreign investors prefer dividend stocks. The Vol regression sign is found to be a significant negative (-) sign in all models in  $\langle \text{Table 4} \rangle$  and  $\langle \text{Table 5} \rangle$ . This is consistent with the prediction sign, showing that foreign investors do not prefer companies with high information risk.

In the case of Big4 regression signs, all except Model 2 in  $\langle \text{Table 5} \rangle$  shows a significant positive (+) sign. This suggests that foreign investors prefer companies with high audit

quality. However, in Model 2 of (Table 5), the Big4 regression sign appears to be not significant, so there are limitations in interpretation.

The Lev regression sign is found to be a significant negative (-) sign in all models in  $\langle \text{Table } 4 \rangle$  and  $\langle \text{Table } 5 \rangle$ . According to these results, it can be interpreted that foreign investors do not prefer companies with high financial risk. The regression signs of Roa and Cfo show significant positive (+) signs in all models in  $\langle \text{Table } 4 \rangle$  and  $\langle \text{Table } 5 \rangle$ . This is consistent with expectations, suggesting that foreign investors prefer companies with high

	Model 1	(For)	Model 2	2(For)	
Coefficient		t-value	Coefficient	t-value	
Intercept	0.0549	1.61	0.0547	1.58	
Comm1	0.0032	1.42			
Comm2			0.0072	1.00	
Comm1×Big4	0.0063	2.53**			
Comm2×Big4			0.0385	4.20***	
Div	0.0181	2.74***	0.0174	2.62***	
Smo	0.0008	0.71	0.0008	0.75	
Esg	0.0032	0.97	0.0033	1.01	
Vol	-1.7048	-6.79***	-1.7336	-6.91***	
Big4	0.0281	2.89***	-0.0011	-0.08	
Lev	-0.0529	-3.82***	-0.0536	-3.87***	
Roa	0.0552	1.86*	0.0555	1.87*	
Cfo	0.1305	3.62***	0.1321	3.66***	
Ind	Includ	ed	Inclu	ded	
Yd	Includ	ed	Inclu	ded	
F-value	22.00*	***	21.88***		
Adj.R <sup>2</sup>	0.217	75	0.21	65	

(Table 5) Additional effect of CTCGEA on the relationship between audit quality	′ and
foreign ownership (results for Hypothesis 2)	

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables is described in  $\langle Table 2 \rangle$ .

profitability and high cash flow.

Summarizing the results of  $\langle \text{Table 4} \rangle$  and  $\langle \text{Table 5} \rangle$ , CTCGEA frequency is found to have a positive relationship with foreign ownership. And an increase in the frequency of communication between those charged with governance and external auditors is found to increase the positive relationship between audit quality and foreign ownership. In other words, active communication between those charged with governance and external auditors can be interpreted as a factor that increases audit quality and increases foreign ownership.

#### 4.3 Additional tests

This study aims to re-examine  $\langle \text{Table 4} \rangle$ and  $\langle \text{Table 5} \rangle$  by measuring the dependent variable and the variable of interest as the amount of change.  $\langle \text{Table 6} \rangle$  is the result of re-examining  $\langle \text{Table 4} \rangle$  and  $\langle \text{Table 5} \rangle$  by measuring For and Comm in Equations (1) and (2) as  $\triangle$ For and  $\triangle$ Comm. When measuring the amount of change as a variable, the number of samples is 1,183 (company-year).

According to the results of Model 1 and Model 2 in  $\langle \text{Table 6} \rangle$ , which re-examined  $\langle \text{Table 4} \rangle$ , both the regression signs of  $\triangle \text{Comm1}$ 

-	Model	1(△For)	Model 2	2(△For)	Model 3	B(△For)	Model	4(△For)
	Coe.	t-value	Coe.	t-value	Coe.	t-value	Coe.	t-value
Intercept	0.0340	0.81	0.0235	0.55	0.0496	1.16	0.0507	1.17
$\triangle \text{Comm1}$	0.0108	6.53***			0.0052	1.71*		
△Comm2			0.0344	5.59***			0.0111	1.28
△Comm1×Big4					0.0078	2.20**		
△Comm2×Big4							0.0444	3.80***
Div	0.0187	2.14**	0.0186	2.12**	0.0189	2.17**	0.0182	2.08**
Smo	0.0007	0.44	0.0008	0.56	0.0006	0.40	0.0007	0.47
Esg	0.0009	0.22	0.0012	0.30	0.0008	0.21	0.0013	0.32
Vol	-1.7320	-5.43***	-1.8073	-5.65***	-1.7066	-5.36***	-1.7537	-5.51***
Big4	0.0461	6.39***	0.0486	6.74***	0.0236	1.89*	-0.0078	-0.48
Lev	-0.0745	-4.07***	-0.0724	-3.93***	-0.0769	-4.20***	-0.0768	-4.19***
Roa	0.0363	0.91	0.0349	0.87	0.0362	0.91	0.0381	0.96
Cfo	0.1789	3.99***	0.1822	4.05***	0.1765	3.94***	0.1817	4.06***
Ind	Incl	uded	Incl	uded	Incl	uded	Incl	uded
Yd	Incl	uded	Incl	uded	Incl	uded	Incl	uded
F-value	15.4	42***	14.8	81***	15.0	)5***	14.	97***
$\mathrm{Adj.R}^2$	0.2	2265	0.2	191	0.2	290	0.2	2280

(Table 6) The results of re-verifying (Table 4) and (Table 5) by measuring CTCGEA as a change

1) \*\*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables is described in  $\langle Table 2 \rangle$ .

and  $\triangle$ Comm2 show significant positive (+) signs. This is consistent with the results in  $\langle$ Table 4 $\rangle$ , suggesting that active CTCGEA acts as an incentive to increase the foreign ownership ratio.

According to the results of Model 3 and Model 4 in  $\langle$ Table 6 $\rangle$ , which re-verified  $\langle$ Table 5 $\rangle$ , the regression signs of  $\triangle$ Comm1×Big4 and  $\triangle$ Comm2×Big4 also show significant positive (+) signs, consistent with  $\langle$ Table 5 $\rangle$ . This suggests that a high CTCGEA further increases the positive (+) relationship between audit quality and foreign ownership ratio. Equations (1) and (2) do not include the size of the company. When size is included in equations (1) and (2), the value of the variance inflation factor, which can cause the problem of multicollinearity, is found to be more than 10. Therefore, in this study, size is measured as a dummy variable and included in equations (1) and (2), and then additional tests are performed.

(Table 7) Models 1 and 2 are the results of additionally testing Hypothesis 1 based on the results of testing Equation (1). And Models 3 and 4 are the results of additionally verifying

	Model	1(For)	Model	2(For)	Model	3(For)	Model	4(For)
	Coe.	t-value	Coe.	t-value	Coe.	t-value	Coe.	t-value
Intercept	0.0225	0.68	0.0152	0.46	0.0358	1.07	0.0364	1.08
Comm1	0.0050	4.37***			0.0003	0.14		
Comm2			0.0165	3.37***			-0.0003	-0.04
Comm1×Big4					0.0060	2.47**		
Comm2×Big4							0.0294	3.25***
Div	0.0081	1.23	0.0073	1.12	0.0089	1.35	0.0084	1.28
Smo	0.0009	0.79	0.0009	0.81	0.0009	0.81	0.0009	0.82
Esg	0.0013	0.41	0.0013	0.40	0.0013	0.40	0.0014	0.43
Vol	-1.2481	-4.97***	-1.2715	-5.05***	-1.2297	-4.90***	-1.2541	-5.00***
Big4	0.0316	5.55***	0.0328	5.76***	0.0124	1.28	-0.0060	-0.45
Lev	-0.0715	-5.21***	-0.0715	-5.20***	-0.0731	-5.33***	-0.0732	-5.33***
Roa	0.0506	1.74*	0.0497	1.71*	0.0493	1.70*	0.0499	1.72*
Cfo	0.1355	3.83***	0.1361	3.84***	0.1358	3.84***	0.1369	3.87***
Sized	0.0573	9.34***	0.0593	9.67***	0.0571	9.32***	0.0571	9.28***
Ind	Incl	uded	Incl	uded	Incl	uded	Incl	uded
Yd	Incl	uded	Incl	uded	Incl	uded	Incl	luded
F-value	26.0	)2***	25.0	62***	25.34***		25.18***	
$\mathrm{Adj.R}^2$	0.2	488	0.2	2458	0.2	507	0.2	2495

(Table 7) Results of including the size effect of the company in equations (1) and (2)

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables: Sized = ln(자산총액이 중위수 이상이면 1, 아니면 0), and for other variables, see (Table 2).

Hypothesis 2 based on the results of testing Equation (2).

When testing the results of Model 1 and Model 2 in  $\langle \text{Table 7} \rangle$ , both the regression signs of Comm1 and Comm2 show significant positive (+) signs. This is consistent with the results in  $\langle \text{Table 4} \rangle$ , and can be interpreted that CTCGEA acts as an incentive to increase the foreign ownership ratio even when controlling for the size effect of the company.

When testing the results of Model 3 and Model 4 in  $\langle \text{Table 7} \rangle$ , the regression signs of Comm1×Big4 and Comm2×Big4 are both significantly positive (+), consistent with  $\langle \text{Table} \rangle$  $\rangle$ . This can be interpreted as indicating that even when controlling for the effect of the company, active CTCGEA further strengthens the positive (+) relationship between audit quality and foreign ownership ratio.

In this study, audit quality is measured using big4. Considering that the research period of this study is 3 years, if there is no change in auditors during the sample period, audit quality can be considered the same. In this regard, this study intends to re-verify  $\langle Table 5 \rangle$  by measuring additional audit quality as the absolute value of discretionary accruals (Dechow et al., 1995).

If audit quality is measured by the absolute value of discretionary accruals, it can be interpreted that audit quality decreases when the absolute value of discretionary accruals increases. In this study, for consistency of interpretation, we intend to measure additional audit quality (N\_aq) by multiplying the absolute value of discretionary accruals (|DA|) measured in the model of Dechow et al. (1995) by '(-1)'. In this case, a high N\_aq can be interpreted as an increase in audit quality.

 $\langle \text{Table 8} \rangle$  is the result of re-verifying  $\langle \text{Table 5} \rangle$ . When testing  $\langle \text{Table 7} \rangle$ , both the Comm1× N\_aq and Comm2×N\_aq regression signs show significant positive (+) signs.  $\langle \text{Table 8} \rangle$  can be interpreted that even when audit quality is measured by other variables, active CTCGEA increases the positive (+) relationship between audit quality and foreign ownership ratio.

 $\langle \text{Table 9} \rangle$  provides a detailed classification of CTCGEA type. Based on  $\langle \text{Table 9} \rangle$ , the total number of communications between the internal audit organization and external auditors during the sample period is 7,152. Specifically, face-to-face communication is 4,038 cases, and non-face-to-face communication is 3,114 cases. The sample period includes the period of the Covid-19 pandemic. Nevertheless, the rate of face-to-face communication is found to be higher than the rate of non-face-to-face communication.

According to  $\langle \text{Table 9} \rangle$ , face-to-face communication between the internal audit organization and external auditors account for approximately 56.5% of the total sample. And non-face-to-face communication is found to account for about 43.5% of the total sample.  $\langle \text{Table 9} \rangle$  suggests that foreign investors can

	Model 1	(For)	Model 2	(For)	
Coefficient		t-value	Coefficient	t-value	
Intercept	0.0620	1.78*	0.0465	1.32	
Comm1	0.0099	8.17***			
Comm2			0.0364	7.12***	
Comm1×N_aq	0.0287	2.15**			
Comm2×N_aq			0.0691	1.93**	
Div	0.0205	2.91***	0.0202	2.85***	
Smo	0.0012	0.95	0.0013	1.08	
Esg	0.0030	0.85	0.0033	0.93	
Vol	-2.1173	-7.97***	-2.2053	-8.29***	
N_aq	0.0003	0.09	-0.0011	-0.27	
Lev	-0.0476	-3.21***	-0.0452	-3.04***	
Roa	0.0647	2.04**	0.0629	1.98**	
Cfo	0.1707	4.41***	0.1727	4.44***	
Ind	Includ	led	Inclue	ded	
Yd	Includ	led	Included		
F-value	16.66	* * *	15.93***		
$Adj.R^2$	0.18	33	0.17	63	

(Table 8) The results of re-verifying Equation (2) by measuring the audit quality as 'the absolute value of discretionary occurrence (|DA|) × (-1)'

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables:  $N_aq = |DA| \times (-1)$ , and for other variables, see (Table 2).

(Table 9) Communication type b	petween internal au	udit organization and	external auditor (details)
--------------------------------	---------------------	-----------------------	----------------------------

Туре	Cases (ratio, %)		
Face-to-face communication	4,038 (56.5%)		
Non-face-to-face communication	3,114 (43.5%)		
total	7,152		

make different decisions depending on the type of communication. Therefore, this study additionally tests what kind of investment decisions foreign investors are making according to the CTCGEA type.

Equation (3) below is a model for testing the relationship between communication type and foreign ownership. Based on  $\langle \text{Table 6} \rangle$ , communication types are divided into faceto-face communication (F-Comm) and nonface-to-face communication (O-Comm). And Equation (4) is a model to test whether the communication type has an additional effect on the relationship between audit quality and foreign ownership.

When dividing into communication types, the mean (median) of F-Comm1 and F-Comm2 is 2.0550 (1.0000) and 0.8422 (0.6931). The mean (median) of O-Comm1 and O-Comm2 is 1.5847 (1.0000) and 0.7506 (0.6931).

$$For_{i,t} = \beta_0 + \beta_1 F - Comm_{i,t} + \beta_2 O - Comm_{i,t} + \beta_3 Div_{i,t} + \beta_4 Smo_{i,t} + \beta_5 Esg_{i,t} + \beta_6 Vol_{i,t} + \beta_7 Big4_{i,t} + \beta_8 Le v_{i,t} + \beta_9 Roa_{i,t} + \beta_{10} Cfo_{i,t} + \beta_{11} Ind + \beta_{12} Yd + \epsilon$$
(3)

$$\begin{aligned} For_{i,t} &= \beta_0 + \beta_1 F - Comm_{i,t} + \beta_2 F - Comm_{i,t} \times Big4, \\ &+ \beta_3 O - Comm_{i,t} + \beta_4 O - Comm_{i,t} \times Big4_{i,t} \\ &+ \beta_5 Div_{i,t} + \beta_6 Smo_{i,t} + \beta_7 Esg_{i,t} + \beta_8 Vol_{i,t} \\ &+ \beta_9 Big4_{i,t} + \beta_{10} Le v_{i,t} + \beta_{11} Roa_{i,t} \\ &+ \beta_{12} Cfo_{i,t} + \beta_{13} Ind + \beta_{14} Yd + \epsilon \end{aligned}$$

F-Comm

- F-Comm1: Number of face-to-face communications between internal audit organization and external auditors
- F-Comm2: ln(F-Comm1+1(one))

O-Comm

- O-Comm1: Number of non-face-to-face communications between internal audit organization and external auditors
- O-Comm2: ln(O-Comm1+1(one)) For other variable definitions, refer to equations (1) and (2).

⟨Table 7⟩ is the result of testing equation (3). Model 1 in ⟨Table 7⟩ is the result of testing face-to-face communication and nonface-to-face communication by measuring F- Comm1 and O-Comm1, respectively. Model 2 in  $\langle \text{Table 7} \rangle$  is the result of testing face-toface communication and non-face-to-face communication by measuring F-Comm2 and O-Comm2, respectively.

According to  $\langle \text{Table 10} \rangle$ , the regression signs of F-Comm1 and F-Comm2 are found to have significant positive (+) signs in all models. This indicates that face-to-face communication between the internal monitoring organization and external auditors has a positive relationship with foreign ownership. In *i*,*t* other words, this can be interpreted that active face-to-face communication between those charged with governance and external auditors increases foreign ownership.

In (Table 10), the regression signs of O-Comm1 and O-Comm2 are found to be not significant in all models. This can be interpreted that non-face-to-face communication between those charged with governance and external auditors does not have foreign ownership and relationship.

The results in  $\langle \text{Table 10} \rangle$  show that faceto-face communication between those charged with governance and external auditors has a positive relationship with foreign ownership. However, non-face-to-face communication is found to be unrelated to foreign ownership.

This suggests that foreign investors believe that only face-to-face communication is a factor in improving audit quality. Therefore, the frequency of face-to-face communication

	Model	1(For)	Model 2	Model 2(For)			
	Coefficient	t-value	Coefficient	t-value			
Intercept	0.0377	1.14	0.0290	0.87			
F-Comm1	0.0109	9.32***					
F-Comm2			0.0348	9.21***			
O-Comm1	-0.0012	-0.69					
O-Comm2			-0.0008	-0.17			
Div	0.0208	3.17***	0.0190	2.89***			
Smo	0.0009	0.81	0.0009	0.82			
Esg	0.0022	0.66	0.0024	0.74			
Vol	-1.5278	-6.12***	-1.5564	-6.24***			
Big4	0.0527	9.59***	0.0544	9.86***			
Lev	-0.0545	-3.98***	-0.0559	-4.09***			
Roa	0.0547	1.87*	0.0542	1.85*			
Cfo	0.1331	3.73***	0.1332	3.73***			
Ind	Inclu	ıded	Included				
Yd	Inclu	ıded	Included				
F-value	24.1	8***	24.29***				
$Adj.R^2$	0.2	348	0.2357				

(Table 10) Relation between CTCGEA type and foreign ownership

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables: F-Comm1 = Number of face-to-face communications between internal audit organization and external auditors, F-Comm2 = ln(F-Comm1+1(one)), O-Comm1 = Number of non-face-to-face communications between internal audit organization and external auditors, O-Comm2 = ln(O-Comm1+1(one)), and for other variables, see (Table 2).

appears to have a positive relationship with foreign ownership. In this respect, it is believed that the results presented in  $\langle \text{Table 4} \rangle$  appear due to the effect of face-to-face communication.

 $\langle \text{Table 11} \rangle$  is the result of testing equation (4). Model 1 in  $\langle \text{Table 11} \rangle$  is the result of testing by measuring face-to-face communication and non-face-to-face communication with F-Comm1 and O-Comm1. Model 2 in  $\langle \text{Table 11} \rangle$  is the result of a test measuring face-to-face communication and non-face-to-face com-

munication with F-Comm2 and O-Comm2.

According to (Table 11), the regression signs of F-Comm1×Big4 and F-Comm2×Big4 are significantly positive (+) in all models. This indicates that face-to-face communication between the internal audit organization and external auditors increases the positive relationship between audit quality and foreign ownership.

However, the regression signs of O-Comm1 ×Big4 and O-Comm2×Big4 are significantly

	Model	1(For)	Model 2(For)			
	Coefficient	t-value	Coefficient	t-value		
Intercept	0.0480	1.44	0.0468	1.41		
F-Comm1	0.0023	0.95				
F-Comm2			0.0059	0.93		
F-Comm1×Big4	0.0116	4.31***				
F-Comm2×Big4			0.0456	5.98***		
O-Comm1	0.0029	1.04				
O-Comm2			0.0077	1.13		
O-Comm1×Big4	-0.0091	-2.69***				
O-Comm2×Big4			-0.0235	-2.70***		
Div	0.0228	3.51***	0.0213	3.30***		
Smo	0.0008	0.78	0.0008	0.71		
Esg	0.0009	0.27	0.0010	0.32		
Vol	-1.3946	-5.62***	-1.3201	-5.35***		
Big4	0.0464	4.77***	0.0370	3.17***		
Lev	-0.0562	-4.15***	-0.0603	-4.48***		
Roa	0.0570	1.97**	0.0568	1.97**		
Cfo	0.1319	3.73***	0.1325	3.78***		
Ind	Inclu	ıded	Included			
Yd	Inclu	ıded	Included			
F-value	24.36*** 25.85***					
$Adj.R^2$	0.24	498	0.26	616		

$\langle Table   11 \rangle Additional$	effect c	f CTCGEA type	on the	relationship	between	audit	quality	and
		foreign o	wnersh	ip				

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables: F-Comm1 = Number of face-to-face communications between internal audit organization and external auditors, F-Comm2 =  $\ln(F-Comm1+1(one))$ , O-Comm1 = Number of non-face-to-face communications between internal audit organization and external auditors, O-Comm2 =  $\ln(O-Comm1+1(one))$ , and for other variables, see (Table 2).

negative (-) in all models. This can be interpreted that non-face-to-face communication between the internal audit organization and external auditors reduces the positive relationship between audit quality and foreign ownership.

 $\langle {\rm Table \ 11} \rangle$  shows that face-to-face commu-

nication increases the positive relationship between audit quality and foreign ownership, but non-face-to-face communication weakens the positive relationship between audit quality and foreign ownership. These results suggest that domestic foreign investors believe that audit quality will systematically differ depending on the CTCGEA type. Therefore, it is believed that domestic foreign investors make investment decisions by considering the detailed ratios of the CTCGEA type.

In this study, in order to test whether the results of Hypothesis 1 and Hypothesis 2 presented above differ before and after the introduction of the new external audit law, the following model is established and additional tests are performed. In Equation (5) below, the effect of the introduction of the new external audit law on the relationship between audit quality and foreign ownership ratio can be identified by the sign of  $\beta_{11}$ .

$$\begin{split} For_{i,t} &= \beta_0 + \beta_1 Comm_{i,t} + \beta_2 Comm_{i,t} \times Big4_{i,t} \\ &+ \beta_3 Div_{i,t} + \beta_4 Smo_{i,t} + \beta_5 Esg_{i,t} + \beta_6 Vol_{i,t} \\ &+ \beta_7 Big4_{i,t} + \beta_8 Le\, v_{i,t} + \beta_9 Roa_{i,t} + \beta_{10} Cfo_{i,t} \\ &+ \beta_{11} Comm_{i,t} \times Big4_{i,t} \times New_{i,t} \\ &+ \beta_{12} Comm_{i,t} \times New_{i,t} + \beta_{13} Big4_{i,t} \times New_{i,t} \\ &+ \beta_{14} New_{i,t} + \beta_{15} Ind + \beta_{16} Yd + \epsilon \end{split}$$

New: 0 if the period is before the introduction of the new external audit law, otherwise 1 For other variable definitions, refer to equations (1) and (2).

In order to test the above equation (5), this study examines the business reports of KOSPIlisted companies from the years before the introduction of the new external audit law (from 2016 to 2018). As a result, it is found that 6 companies disclose the number of communications between the internal audit organization and external auditors in 2017 and 12 companies disclose the number of communications between the internal audit organization and external auditors in 2018.

In this study, additional tests are conducted by reconstructing the sample targeting these 18 companies. The 18 companies are companies that disclose the number of communications before and after introduction. Therefore, the sample targeting 18 companies is reconstructed. In this case, the number of samples is 53 (company-year).

(Table 12) below is the result of testing the above equation (5). Model 1 is the result of measuring Comm as Comm1, and Model 2 is the result of testing Comm as Comm2. Looking at the test results, the regression signs of Comm1×Big4×New and Comm2×Big4×New are found to be insignificant in each model. This can be interpreted as the effect of CTCGEA on the relationship between audit quality and foreign ownership ratio is no different before and after the introduction of the new external audit law. These results are the result of an insufficient number of samples. Therefore, it is judged that caution is required in interpretation.

In order to verify the effect of the introduction of the new external audit law, this study verifies whether there are differences in the number of CTCGEAs and the foreign ownership ratio before and after the introduction of the new external audit law. Specifically, this

	Model	1(For)	Model 2(For)			
	Coe.	t-value	Coe.	t-value		
Intercept	0.1663	0.79	0.2444	1.42		
Comm1	0.0395	0.40				
Comm2			-0.0390	-0.33		
Comm1×Big4	-0.0525	-0.50				
Comm2×Big4			-0.0272	-0.56		
Div	-0.1882	-2.62**	-0.1884	-2.61** 1.06		
Smo	0.0191	0.97	0.0204			
Esg	-0.0519	-1.53	-0.0532	-1.60		
Vol	-5.4568	-2.00**	-5.3077	-1.97* 3.77***		
Big4	0.5866	2.88***	0.5128			
Lev	-0.1009	-0.78	-0.0920	-0.69		
Roa	1.2189	3.21***	1.2905	3.26***		
Cfo	-0.2863	-0.65	-0.2968	-0.69		
Comm1×Big4×New	0.0121	0.29				
Comm2×Big4×New			0.0465	0.24		
Comm1×New	0.0196	0.09				
Comm2×New			0.0273	0.56		
Big4×New	0.0927	0.31				
Big4×New			0.1149	0.25		
New	-0.0621	-0.16	-0.0758	-0.23		
Ind	Included		Included			
Yd	Incl	uded	Included			
F-value	4.9	8***	4.98***			
$\mathrm{Adj.R}^2$	0.5	5926	0.5	5934		

〈Table	12>	Results	of	testing	the	effects	before	and	after	the	introduction	of	the
					new	externa	al audit	law					

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables: New = 0 if the period is before the introduction of the new external audit law, otherwise 1, and for other variables, see (Table 2).

study performs a mean difference verification targeting the 53 (company-year) presented above.

 $\langle$ Table 13 $\rangle$  shows that the for average before the introduction of the new external audit law is 0.2526, and the for average after the introduction of the new external audit law is 0.2387. In other words, the foreign ownership ratio before the introduction of the new external audit law is higher than the foreign ownership ratio after the introduction, but it is found to be statistically insignificant.

Variables	Period	Mean	Std	t-value			
	The period before the introduction of the new external audit law(B, n=18)	0.2526	0.0434				
For	The period after the introduction of the new external audit law(A, n=35)	0.2387	0.0353	-0.23			
	Diff = mean(A) - mean(B) = -0.0139						
	The period before the introduction of the new external audit law(B, n=18)	3.0555	0.3075				
Comm1	The period after the introduction of the new external audit law(A, n=35)	8.2285	0.7757	4.66			
	Diff = mean(A) - mean(B) = 5.1730						
Comm2	The period before the introduction of the new external audit law(B, n=18)	1.3442	0.0845				
	The period after the introduction of the new external audit law(A, n=35)	2.0957	0.0884	5.45			
	Diff = mean(A) - mean(B) = 0.7515						

(Table 13) Mean difference test on foreign equity ownership and CTCGEA

1) \*\*\*, \*\* and \* are significant at the 1%, 5% and 10% levels, respectively.

2) Description of variables is described in  $\langle Table 2 \rangle$ .

For Comm1 and Comm2, the values are 3.0555 and 1.3442 before the introduction of the new external audit law, and 8.2285 and 2.0957 after the introduction of the new external audit law. The average of these Comm variables is found to be higher after the introduction of the new external audit law, and it is also found to be statistically significant.

 $\langle \text{Table 13} \rangle$  shows that the number of CTCGEAs increased due to the introduction of the new external audit law. According to  $\langle \text{Table 13} \rangle$ , the increase in the number of communications appears to have a positive effect on the foreign ownership ratio. However,  $\langle \text{Table 7} \rangle$  shows that there is no relationship between the introduction of the new external audit

law and the foreign ownership ratio. In summary, the relationship between CTCGEA and the foreign ownership ratio is judged to be the result of the increase in the frequency of communication rather than the effect of the new external audit law.

# V. Conclusion

This study tests the effect of those charged with governance and communication between external auditors (CTCGEA) on foreign ownership. This study establishes two hypotheses based on the finding that foreign investors consider audit quality when making investment decisions. In this study, those charged with governance are measured by internal audit organization.

This study conducts an empirical test by selecting companies listed on KOSPI as a sample from 2019 to 2021. As a result of testing Hypothesis 1, CTCGEA frequency is found to have a positive relationship with foreign ownership. The test results of Hypothesis 2 show that high-CTCGEA further increases the positive relationship between audit quality and foreign ownership.

This suggests that active communication between those charged with governance and external auditors is acting as an incentive to improve audit quality. Therefore, it means that companies that conduct frequent communication between those charged with governance and external auditors are increasing the preference of domestic foreign investors.

This study additionally tests the effect of communication type (face-to-face and nonface-to-face) on foreign ownership. The test results show that face-to-face communication frequency has a positive relationship with foreign ownership. However, non-face-to-face communication is found to have no foreign ownership or relationship. According to these additional test results, the results of Hypothesis 1 can be interpreted as showing the effect of face-to-face communication.

In particular, the frequency of face-to-face communication is found to increase the positive relationship between audit quality and foreign ownership. The number of non-faceto-face communications is found to decrease the positive relationship between audit quality and foreign ownership. According to the results of these additional tests, domestic foreign investors are making decisions considering the CTCGEA type of the investment target company.

This study is expected to have policy implications in that it tested the effect of CTCGEA resulting from the introduction of the 'Revised New External Audit Law (effective in November 2018)' from the perspective of corporate governance. In other words, this study is expected to have a contribution in that it presents empirical data showing that the introduction of the 'Revised New External Audit Law' can change corporate governance.

### References

- Ahn, Y. Y., H. H. Shin, and J. H. Jang(2005), "The Relationship between the Foreign Investor And Information Asymmetry," *Korean Accounting Review*, 30(4), pp.109-131.
- Baek, M. K., and S. H. Moon(2010), "Do Foreign Investors Consider Audit Quality at Investment Decision in Korea Stock Market?," *Korea International Accounting Review*, 29, pp.131-159.

Cheon, Y. S. (2003), "The Association Between Foreign

and Domestic Institutional Ownership and Earnings Quality," *Korean Management Review*, 32(4), pp.1001-1032.

- Choi, J. H.(2006), "Audit Quality and Earnings Management of Initial Public Offerings Firms," *Korean Accounting Review*, 31(4), pp.113– 143.
- Cohen, J., G. Krishnamoorthy, and A. M. Wright (2002), "Corporate governance and the audit process," *Contemporary Accounting Research*, 19(4), pp.573-594.
- Cohen, J., L. M. Gaynor, G. Krishnamoorthy, and A. M. Wright(2008), "Academic research on communications among external auditors, the audit committee, and the board: Implications and recommendations for practice," *Current Issues in Auditing*, 2(1), pp.A1-A8.
- Dechow, P., R. Sloan, and A. Sweeney(1995), "Detecting Earnings Management," *The Accounting Review*, 70(2), pp.193-225.
- Goh, J. M., S. I. Kim, and H. Y. Lee(2009), "The Association between Proxies for Audit Quality and the Quality of Accruals," *Korean Accounting Review*, 34(2), pp.1-43.
- Hong, J. Y., and Y. J. Kim(2021), "The Effect of Communication Method and Social Tie between External Auditors and Internal Audit Organizations on Earnings Quality," Accounting Information Review, 39(2), pp.1-26.
- Hong, J. Y., S. M. Kim, and S. H. Shin(2022), "The Effect of Communication Behavior between Audit Committee and External Auditor on Audit Quality," *Korean Accounting Review*, 47(6), pp.163-203.
- Hwang, I. T., D. J. Jung, and S. M. Kang(2009), "Does Outstanding Audit Quality of Big 4 Audit Firms Apply to Corporations at All

Sizes?," *Korean Management Review*, 38(1), pp.1-34.

- Jung, H. U.(2015), "The Effect of Voluntary Disclosure Level on Foreign Equity Ownership," Korea International Accounting Review, 59, pp. 167-192.
- Jung, H. U., and K. I. Lee(2016), "The Effect of Domestic Product Market Competition on Foreign Equity Ownership," *Journal of Taxation* and Accounting, 17(4), pp.135-160.
- Jung, H. U., and Y. E. Cho(2018), "A Study on the Relation between Earnings Quality and Dividends Foreign," *Review of Accounting* and Policy Studies, 23(3), pp.195-220.
- Jung, H. U., H. J. Lee, and T. H. Mun(2014), "The Relation between Auditor Change and Foreign Equity," *Journal of Taxation and Accounting*, 24(1), pp.97-128.
- Jung, H. U., H. J. Lee., and K. I. Lee(2014), "A Study on the Relation between Foreign Equity Ownership and Corporate Tax Burden," *Koran Journal of Taxation Research*, 31(1), pp.105– 133.
- Jung, H. U., and H. J. Lee(2014), "A Study on the Relation between Debt Financing and Foreign Equity," Study on Accounting, Taxation & Auditing, 56(3), pp.33-60.
- Jung, H. U., and S. Y. Byun(2024), "The Effect of Communication between Internal Audit Organizations and External Auditors on Heterogeneous Beliefs among Investors," Study on Accounting, Taxation & Auditing, 66(1), pp.75-109.
- Kang, J., and R. Stulz(1997), "Why is there a home bias? An Analysis of Foreign Portfolio Equity Ownership in Japan," *Journal of Financial Economics*, 46(1), pp.3-28.

- Kim, J. G., and K. S. Kim(2020), "Relationship between Frequency of External Auditors' Communication with those Charged with Governance and Audit Quality," *Journal of Taxation and Accounting*, 21(3), pp.29-48.
- Kim, S. M., and Y. W. Jang(2012), "Investment Horizons of Foreign Investors and Corporate Dividend Policy," *Korean Journal of Financial Studies*, 41(5), pp.781-812.
- Kim, Y. C., and J. K. Ko(2011), "Book-tax Differences and Earnings Quality," *Koran Journal of Taxation Research*, 28(4), pp.87-119.
- Kim, Y. J., and J. Y. Hong(2011), "The Effect of Communication between External Auditors and Those Charged with Governance on Earnings Response Coefficient," *Korean Journal* of Management Accounting Research, 21(1), pp.1-23.
- Ko, D. Y., E. Y. Baik, and M. K. Ahn(2012), "The Effect of Corporate Governance on Foreign Investor Ownership," *Accounting Information Review*, 30(1), pp.29–59.
- Kwon, S. Y., and E. S. Ki(2011), "The Effect of Accruals Quality on the Audit Hour and Audit Fee," *Korean Accounting Review*, 36 (4), pp.95-137.
- Lee, J. H., and S. G. Kim(2006), "The Analysis on the Relation between the Earnings Quality and the Foreign Ownership," *Review of Accounting and Policy Studies*, 11(3), pp.199– 227.
- Lee, M. W., and J. H. Rho(2006), "The Effects of Foreign Investors on Domestic Firms - An Analysis of Dividends, Investments, Donations and the Acquisition of Treasury Stocks -," *Journal of Taxation and Accounting*, 7(1), pp.7-25.

- Lee, S. J., H. J. Kim, and W. S. Choi(2021), "The effects of communication between an external auditor and a firm's governance on the detection of embezzlement and malpractice," *Study on Accounting, Taxation & Auditing*, 63(4), pp.1-39.
- Lev, B., and S. R. Thiagarajan(1993), "Fundamental Information Analysis," *Journal of Accounting Research*, 31(2), pp.190–215.
- Moon, S. H., H. J. Lee, and H. M. Ji(2006), "The Effect of Corporate Governance on the Quality of Earnings, Operating Performance, and Firm Value," Study on Accounting, Taxation & Auditing, 44, pp.257-288.
- Park, J. I., H. J. Nam, and S. H. Choi(2011), "Audit Quality of Big 4 Auditors and Credit Ratings - Focused on Non-listed Firms -," *Journal of Taxation and Accounting*, 12(3), pp.275-306.
- Park, J. K., and Y. E. Hong(2009), "Corporate Tax Avoidance and Foreign Ownership," Koran Journal of Taxation Research, 26(1), pp. 105-135.
- Read, W., and K. Raghunandan(2001), "The State of Audit Committees," *Journal of Accountancy*, 191(May), pp.57-60.
- Shim, J., Y. K. Yoo, and S. W. Yoo(2021), "The Impacts of Mandated Audit Communication on Audit Hour, Audit Fee and Firm's Earnings Management," *Korea International Accounting Review*, 99, pp.71-106.
- Shin, H. Y., and A. S. Jeong(2007), "The Impact of Corporate Characteristics on Dividend," *Korean Business Education Review*, 45(1), pp.211– 232.
- Shin, J. Y., C. W. Suh, and J. I. Park(2012), "The Effect of Corporate Governance on the

Association between Earnings and Credit Ratings," *Korean Management Review*, 41 (6), pp.1309-1345.

Sul, W. S., and S. A. Kang(2006), "Foreign Institutional Investors and Firm's Managerial Decision Making," Korea Trade Review, 31 (4), pp.99-128.

Yoon, M. O., and S. H. Kim(2022), "Effect of a Company's ESG Level on Foreign Investment: Focusing on the Moderating Effect of Tax Benefits," *Korean Accounting Journal*, 31 (5), pp.111-133.

<sup>•</sup> The author Hyun Uk Jung is currently an associate professor in the Department of Business Administration (Accounting) at Dong-A University Business School. I received my bachelor's, master's and doctoral degrees from Yeungnam University. I am majoring in Financial Accounting, and I am currently conducting research related to corporate governance and capital markets.

<sup>•</sup> The author Sun Young Byun is currently an associate professor in the Department of International Trade at Dong-A University Business School. In the international Business, CSR and ESG are detailed majors.