THE EFFECTS OF CORPORATE GOVERNANCE RANKING MECHANISMS ON AUDIT QUALITY IN DIFFERENT BUSINESS LIFE CYCLE STAGES

Yu-Ting Huang

Department of Business Administration, MingDao University, Changhua City, Taiwan.

E-mail: g10104602@cycu.org.tw

Abstract

Previous studies have not yet examined the correlation between the audit fees and corporate governance ranking; in view of this, the study examines Big Four accounting firms (Big 4) and carries out an empirical analysis of different business life cycle stages, with the intention of understanding the correlation between the corporate governance ranking and the audit fees. Using audit fees as the proxy for audit quality, this study finds the results suggest that in terms of the companies audited by the Big 4, the companies in the maturity stage, and the companies in the decline stage, a better corporate governance ranking result would require a greater amount of audit fees, meaning that the companies with outstanding corporate governance would pay more audit fees to hire accountants capable of conducting high-quality audits, in order to achieve higher audit quality.

Keyword: audit quality, corporate governance ranking mechanisms, business life cycle stages

1. Introduction

Over the decades, the global capital markets have been severely impacted by accounting scandals, such as the Enron scandal in 2001 and the WorldCom scandal in the following year in the U.S. As a result, securities authorities around the world began to place greater emphasis on the corporate governance mechanisms when developing policies and regulations pertaining to boosting the stock market, in hopes of speedily restoring discipline in the capital markets and rebuilding investor confidence. In Taiwan, the securities authority is no exception, in order to help the companies raise their corporate governance level and capital market quality, the securities authority in Taiwan not only establishes a governance system within the companies based on relevant laws and regulations, but also proposes practical methods that motivate the companies to give weight to and improve their governance performance by disclosing the implementation status as well as information on the corporate governance mechanisms results.

The corporate governance evaluation information is jointly commissioned by the Taiwan Stock Exchange Corporation and Taipei Exchange that the content of its evaluation is mainly based on the International Organization for Economic Co-operation and Development (OECD)[1]. The expected goals of this evaluation include encouraging companies to pay more attention to the quality of corporate governance, motivating companies through the evaluation results, rewarding companies with excellent evaluation results, expecting companies to integrate with international standards, and performance has improved. Given the fact that the evaluation results from the Taiwanese information evaluation systems are becoming more and more precise, the purpose of the study is to examine whether more precise information evaluation results would lead to greater information transparency and subsequently cause various levels of impact on the audit fees. By extending previous researchers' findings (Shiue et al. 2017), the study aims at offering a further analysis of the correlation between the corporate governance ranking and the audit

fees, with the intention of discovering whether a more detailed classification of information disclosure levels would facilitate a closer examination of the quality of financial statements and subsequently affect the amount of audit fees.

[1] The Six Principles of Corporate Governance issued in 2004 were adjusted to five dimensions: the protection of shareholders' rights and interests, equal treatment of shareholders, the structure and operation of the board of directors, information transparency, and the protection of the interests of stakeholders and corporate social responsibility (The first corporate governance ranking included 92 indicators, the weights of which were 15%, 15%, 35%, 20%, and 15%).

With several accounting scandals worldwide having occurred one after another, most countries have now regarded corporate governance as a significant issue. Nevertheless, whether the introduction of the corporate governance ranking mechanisms can really enhance financial reporting quality or is merely a nominal act of change catering to the norm is another issue worth investigating. Chang and Fang (2006) found suggest that in the first “Information Disclosure Evaluation” in 2003, the companies disclosed a lot more private information in order to achieve better evaluation results, and therefore succeeded in enhancing the companies’ self-monitoring system as well as preventing the managers from manipulating the earnings. In other words, the implementation of the evaluation system is indeed effective in achieving the initially set goals.

The major reasons for the occurrences of fraudulent financial reporting that have led to the public’s mistrust of the effectiveness of the accountants’ audit work are associated with not only the companies’ intention of performing deceitful financial statements, but the accountants’ lack of independence, which largely hinges on the amount of audit fees the accountants receive from the clients, as well. As investors detect an abnormal level of audit fees paid by the company to the accountant, they would assume that the accountant’s independence is affected, and therefore doubt of the accuracy of the company’s financial reporting as well as have a negative impression of the company (Craswell and Francis, 1999; Lai, 2009). In order to regain investor confidence, strengthen the credibility of corporate financial statements, increase the responsibility of company executives for the transparency of financial statements to reform the accounting profession. The United States voted through the Sarbanes-Oxley Act of 2002, in order to actively strengthen corporate governance and accountability to restore public confidence in the investment community. The purpose of the Sarbanes-Oxley Act is to rebuild the public’s confidence in the capital market and introduce the concept of corporate sustainability, to establish a benign trust between the company and the public, hoping to strengthen financial information that is correct and reliable, corporate operations and financial information are more transparent.

In Taiwan, due to the partial disclosure of audit fees since 2002, early research used questionnaires to understand the situation of audit fees (Chen et al. 2003). In recent years, due to compliance with International Financial Reporting Standards (IFRSa), most listed companies purchased major non-audit services in the process of integration, and the flexibility of optional scale disclosure on audit fees which has resulted in a substantial increase in the disclosure ratio (Liao et al. 2012; Guan et al. 2019). In other words, the primary focus of the study is to examine whether the implementation of corporate governance evaluation can guide the listed companies to truly achieve the evaluation goals, the result of which can be attested by the enhancement of the information on the audit fees. Moreover, the study further investigates the difference in audit fee among the Big Four accounting firms (also known as the “Big 4”), in hopes of gaining an insight into the correlation between the corporate governance ranking and the audit fees.

The business life cycle is an extension of the product life cycle, and this concept has been widely used in management, marketing, and economic literature (Smith et al. 1985; Anthony and Ramesh, 1992). According to Porter (1980), in the growth stage of the life cycle, a company can gain the best profit through cost reduction and its competitive advantage. In contrast, in the decline stage, a company is much less likely to increase profits with its competitive advantage. In view of this, based on the notion of the life cycle, the study examines whether different business life cycle stages would bring about different evaluation results as regards the audit fees in corporate governance ranking.

The remainder of this study is organized as follows: Section 2 discusses the literature review and hypothesis development. Section 3 describes the sample selection procedure and research design. Section 4 reports the empirical results. Conclusions are drawn in Section 5.

2. Literature Review

After the 1997 Asian Financial Crisis, there were more people discussing corporate governance in Asia, and the establishment of corporate governance issues and systems have gradually received more attention. During the financial crisis, many companies lacked the principles of corporate governance and management system, which led to financial crises. Compared with American companies, Asian companies had a vague concept of corporate governance at the time, and the deep understanding of corporate governance was even poorer and backward. The main reason was that companies did not attach importance to corporate governance and lacked regulations to follow. Prowse (1998) points out that the maturity level of the corporate governance system can affect not only a company's operation and development but the whole country or region. For instance, one of the major causes of the Asian Financial Crisis was the flaws in the corporate governance mechanisms. After the Enron incident, the United States voted through the Sarbanes-Oxley Act in July 2002. The Sarbanes-Oxley Act, also known as the Enterprise Reform Act, aims to emphasize the responsibilities of companies and their executives, strengthen information disclosure, improve accounting and auditing standards, and improve the penalties for illegal behaviors are expected to be curbed through the strengthening of corporate governance.

The Taiwan Stock Exchange Corporation announced the "Practical Regulations on Corporate Governance" on October 4, 2002, actively implementing corporate governance mechanisms and introducing many American mechanisms, hoping to improve the protection of investors by improving corporate governance of listed companies. In order to facilitate the promotion of corporate governance in listed companies in Taiwan, assist businesses in achieving full development, and boost investor confidence, the Financial Supervisory Commission (FSC) of Taiwan has collaborated with private institutions relevant to corporate governance in establishing a corporate governance evaluation system2, with which it hopes the companies can place greater emphasis on achieving the corporate governance goals and rectifying their internal system, so that the overall corporate governance level can be increased. In this way, the FSC hopes to encourage positive competition among companies and enhance the companies' governance level, as well as foster the culture of taking the initiative in strengthening corporate governance. In addition, previous studies have also found that companies with better corporate governance would show greater operating performance as well (Shih & Huang 2019; Liu & Huang 2019; Huang 2020).

Audit fees are agreed between the supplier and the demander. Past empirical studies have found consistent findings on how the characteristics of demanders affect audit fees. The determinants of audit fee include business scope, operational complexity, working hours, professional skills and knowledge, cost, previous charging standards, and the client's corporate scope as well as status (Simunic and Stein, 1987; Chang and Tsao, 2005; Hay et al. 2006). The complexity of the business deal is the most crucial determinant of audit fee. Given that audit quality cannot be judged directly by the appearance, the accounting firms with a greater brand reputation would have a higher chance of charging more audit fees. In addition, in terms of audit requirements, the literature on selecting the type of accounting firm is mostly based on agency costs. Those believe that the agency cost of the company is higher, and that tend to appoint the Big Four accounting firms to audit the accounts to obtain higher audit quality. At the same time, higher audit fees are paid to reduce agency costs.

In other words, this study uses listed companies in Taiwan from 2017 to 2019 as the sample to conduct the empirical analysis, the fact that the companies with greater corporate governance performance would pay more audit fees show that these companies, in order to achieve higher financial reporting quality, would often hire accountants capable of performing high-quality audit work by paying more audit fees to them. In view of this, the study assumes a negative correlation between better corporate governance ranking mechanisms (*CGRM*) and the amount of audit fees (*LnAF*), which leads to Hypothesis 1:

[2] The evaluation procedures and results of the Corporate Governance Evaluation System are launched by the Securities and Futures Institute (SFI) of Taiwan and can be found in the "Corporate Governance Evaluation" section on the SFI website: http://www.sfi.org.tw/E/Plate.aspx?ID=3404.

H_1: A negative correlation exists between corporate governance ranking mechanisms and audit fees.

The business life cycle is a topic widely explored by researchers in the field of management studies (Porter, 1980；Smith et al., 1985; Pashley and Philippatos, 1990). A company would exhibit different levels of inclination to voluntarily dissolve itself in different life cycle stages (Pashley and Philippatos, 1990). Based on the methods proposed by Anthony and Ramesh (1992) and Black (1998), the study uses four variables: the dividend payout ratio, the sales growth rate, capital expenditure, and years of business establishment, in determining the business life cycle stage under which each sample shall be classified and examining the effects of corporate governance ranking on the audit fees in different business life cycle stages. Furthermore, the study classifies the samples into three stages (growth stage, maturity stage, and decline stage) for analysis based on different business life cycle stages, in order to find out whether different business life cycle stages would bring about different effects on the audit fees. The study then puts forth a set of hypotheses as follows:

$H_{2\text{-}1}$: In the growth stage, a correlation exists between CGRM and LnAF.

$H_{2\text{-}2}$: In the maturity stage, a correlation exists between CGRM and LnAF.

$H_{2\text{-}3}$: In the decline stage, a correlation exists between CGRM and LnAF.

3. Research Method

3.1 Sources of Data

The study examines the listed companies in the Taiwan Stock Exchange Corporation (TWSE) from 2017 to 2019 in its analysis of the correlation between corporate governance ranking and the audit fees. The data are extracted from the Corporate Governance Evaluation-Taiwan Stock Exchange Corporation (TWSE) Corporate Governance Center, and the Taiwan Economic Journal (TEJ) database. The corporate governance ranking is conducted once a year that the complete annual corporate governance situation from January 1 to December 31 of the previous year is the scope of evaluation and analysis. The research sample excludes banking, insurance and securities industries, mainly because the financial structure of these industries is different from that of general industries, with a total of 1,872 samples collected.

The Taiwan Market Observation Post data identifies 1,872 annual financial filings during the sample period. Panel A of Table 1 presents the yearly (1,691/1,872), showing a slightly increasing trend of auditing by Big4 in the sub-sample that these companies overwhelmingly trusted the audit quality of Big 4 audit firms. Panel B in Table 1 presents the types of business life cycle stages used by the research samples and shows that the proportion of mature period companies are 69.01 percent (1,292/1,872).

Table 1 Sample Distribution

Panel A：Yearly Distribution by Big4 and Non-Big4

Type \ Year	2017	2018	2019	Total
Big4	205 (10.95%)	491 (26.23%)	995 (53.15%)	1,691 (90.33%)
Non-Big4	8 (0.43%)	42 (2.24%)	131 (7.00%)	181 (9.67%%)
Total	213 (11.38%)	533 (28.47%)	1,126 (60.15%)	1,872 (100%)

Panel B：Distribution of Business Life Cycle Stages [a]

Year \ Type	Growth Period	Mature Period	Decline Period	Total
2017	56 (2.99%)	138 (7.37%)	19 (1.01%)	213 (11.38%)
2018	78 (4.17%)	363 (19.39%)	92 (4.91%)	533 (28.47%)
2019	128 (6.84%)	791(42.25%)	207 (11.06%)	1,126 (60.15%)
Total	262 (14.00%)	1,292 (69.01%)	318 (16.99%)	1,872 (100%)

[a] Refer to Black (1998) and Anthony and Ramesh (1992) for the classification of lifecycle stage[s.]

3.2 Research Design and Proxies

3.2.1 Empirical Models

In terms of audit fee measurement, the study borrows Whisenant et al.'s (2003) method, which uses the natural logarithm of the amount of audit fee as a variable, in demonstrating that companies showing greater corporate governance performance would often hire accountants capable of performing high-quality audit work by paying more audit fees to them, in hopes of achieving higher financial reporting quality. The regression model in the study is shown as follows:

$$\mathrm{LnAF}_{i,t} = \gamma_0 + \gamma_1 CGRM_{i,t} + \gamma_2 ROA_{i,t} + \gamma_3 Quick_{i,t} + \gamma_4 DE_{i,t} + \gamma_5 SCED_{i,t} + \gamma_6 ManaHol_{i,t} + \gamma_7 Control_{i,t} + \gamma_8 IndDir_{i,t} + \varepsilon_{i,t}$$

The following is a detailed explanation of the regression model components:

LnAF	=	the natural log of audit fees;
CGRM	=	the corporate governance ranking mechanisms (*CGRM*), the TEJ database divides the results of the corporate governance ranking mechanisms (*CGRM*) into seven levels, with 1 point for the top 5%, 2 point for 6% to 20 %, 3 point for 21% to 35%, and so on. 81% to 100% are given 7 point;
ROA	=	return on assets;
Quick	=	quick ratio;
DE	=	debt ratio;
SCED		the stock-control right minus the earnings-distribution right;
ManaHol		manager shareholding ratio;
Control	=	the number of seat-control directors divided by the total board size;
IndDir	=	independent director ratio;
ε	=	residual term.

3.3 Relevant Variables and Operational Definition

3.3.1 Dependent Variable: Audit Fee (*LnAF*)

Using audit fees as the proxy for audit quality, the determinants of audit fee center on the supply side, while the determinants related to the demand side focus on the auditee attributes, including the auditee's scope, operational complexity, and severity of financial distress. According to Hay (2006), there is a positive correlation between the audit fee and the client's scope, risks, as well as complexity level.

3.3.2 Independent Variable: Corporate Governance Ranking Mechanisms (*CGRM*)

In 2014, the FSC performed the first corporate governance ranking, with the intention of encouraging all listed companies to practice and improve corporate governance. In this way, the Financial Supervisory Commission (FSC) hopes to provide investors and companies with a deeper insight into the effects of corporate governance, boost positive competition among companies, and strengthen the companies' corporate governance level.

3.3.3 Control Variable

The study refers to some previous studies when adding control variables, including return on assets (*ROA*), quick ratio (*Quick*), debt ratio (*DE*), the stock-control right minus the earnings-distribution right (*SCED*), manager shareholding ratio (*ManaHol*), the number of seat-control directors divided by the total board size (*Control*), and independent director ratio (*IndDir*). As the previous study suggests, a higher *ROA* and a higher *Quick* would lead to a higher risk in certain projects in the balance sheet, a greater demand for more tests of control and substantive procedures, and inevitably a greater amount of audit fees requested by the accountant (Chen 2003; Francis et al. 2005; Goncharov et al. 2014). When the auditee is in a difficult financial situation and shows poor earning power, the increase in *DE* would lead to a higher audit risk for the accountant and a greater amount of audit fees charged by the accountant (Francis, 1984; Whisenant et al., 2003). Lastly, the study uses corporate governance variables such as *SCED*, *ManaHol*, *Control*, and *IndDir* as control variables.

4. Empirical Results and Analysis

4.1 Descriptive Statistics

As the descriptive statistics in Table 2 suggest, the study classifies the samples into "Total" (the total company samples), "Big4" (the companies audited by the Big 4), and "Non-Big4" (the companies not audited by the Big 4). The fact that the "Big4" companies pay higher audit fees (*LnAF*) suggests that these companies have higher charging standards that those "Non-Big4" companies. What's more, the "Big4" companies also show better corporate governance ranking results (*CGRM*), a higher *ROA*, a higher *SCED*, a higher *ManaHol*, and a higher *IndDir*. This indicates that the "Big4" companies have greater customer scale and complexity, which therefore requires a greater amount of audit fees in consideration of a larger amount of effort put in by the auditors.

Table 2 Descriptive Statistics

Distribution of Big4 and Non-Big4	**Total (n=1,872)**			**Big4 (n=1,691)**			**Non-Big4 (n=181)**		
Variables [a]	**Mean**	**Median**	**Std. Dev**	**Mean**	**Median**	**Std. Dev**	**Mean**	**Median**	**Std. Dev**
LnAF	15.0047	14.9404	0.6252	15.0492	14.9833	0.6262	14.5894	14.5948	0.4350
CGRM	3.5347	3.0000	1.8309	3.4216	3.0000	1.7988	4.5911	4.0000	1.7947
ROA	0.0867	0.0805	0.0866	0.0887	0.0824	0.0867	0.0686	0.0624	0.0836
Quick	2.2741	1.3305	6.7072	2.2104	1.3418	6.3496	2.8693	1.2456	9.4170
DE	0.2886	0.2669	0.1683	0.2892	0.2676	0.1695	0.2836	0.2643	0.1568
SCED	0.0699	0.0144	0.1231	0.0736	0.0151	0.1268	0.0323	0.0047	0.0703
ManaHol	1.3294	0.4000	2.7185	1.3671	0.4200	2.7974	0.9771	0.2500	1.7904
Control	0.4505	0.4286	0.1814	0.4466	0.4286	0.1813	0.4863	0.4444	0.1797
IndDir	0.3001	0.2857	0.1286	0.3019	0.2857	0.1290	0.2834	0.2857	0.1235

[a] *LnAF*: the natural log of audit fees; *CGRM*: the corporate governance ranking mechanisms, the TEJ database divides the results of the corporate governance ranking mechanisms into seven levels, with 1 point for the top 5%, 2 point for 6% to 20 %, 3 point for 21% to 35%, and so on. 81% to 100% are given 7 point; *ROA*: return on assets; *Quick*: quick ratio; *DE*: debt ratio; *SCED*: the stock-control right minus the earnings-distribution right; *ManaHol*: manager shareholding ratio; *Control*: the number of seat-control directors divided by the total board size; *IndDir*: independent director ratio.

4.2 Correlation Matrix

The study uses the Pearson correlation coefficient in examining the correlations between the variables and discussing the direction and degree of influence of the variables, as shown in Table 3. According to Table 3, a significant negative correlation exists between the audit fees (*LnAF*) and the corporate governance ranking mechanisms (*CGRM*), with a correlation coefficient of -0.302. This indicates that the companies with better corporate governance performance would pay higher audit fees. In addition, while a negative correlation exists between *LnAF*, *Quick*, and *ManaHol*, a positive correlation exists between *LnAF*, *ROA*, and *Control*.

Table 3 Correlation Matrix

Variables [a,b]	***LnAF***	***CGRM***	***ROA***	***Quick***	***DE***	***SCED***	***ManaHol***	***Control***	***IndDir***
LnAF	1.000								
CGRM	-0.302*	1.000							
ROA	0.115*	-0.157*	1.000						
Quick	-0.146*	0.063*	-0.077*	1.000					
DE	0.1444	0.044	-0.006	-0.231*	1.000				
SCED	-0.011	-0.180*	0.019	-0.003	0.040	1.000			
ManaHol	-0.090*	-0.006	0.057*	0.025	0.011	0.191*	1.000		
Control	0.165*	-0.019	-0.081*	-0.055*	0.040	0.178*	-0.078*	1.000	
IndDir	-0.006	-0.154*	0.083*	0.0274	-0.028	-0.010	0.061*	-0.404*	1.000

[a] *LnAF*: the natural log of audit fees; *CGRM*: the corporate governance ranking mechanisms, the TEJ database divides the results of the corporate governance ranking mechanisms into seven levels, with 1 point for the top 5%, 2 point for 6% to 20 %, 3 point for 21% to 35%, and so on. 81% to 100% are given 7 point; *ROA*: return on assets; *Quick*: quick ratio; *DE*: debt ratio; *SCED*: the stock-control right minus the earnings-distribution right; *ManaHol*: manager shareholding ratio; *Control*: the number of seat-control directors divided by the total board size; *IndDir*: independent director ratio.

[b] Pearson correlations in the lower diagonal. * Indicates significance at the 5 percent level.

4.3 Regression Analysis Results

4.3.1 Regression Analysis of Audit Fees (*LnAF*) and Corporate Governance Ranking Mechanisms (*CGRM*)

The study aims to find out whether the listed companies that perform corporate governance ranking in Taiwan would have better financial performance by paying higher audit fees. The empirical findings shown in Table 4 suggest that in terms of the "Big4" companies, the estimated coefficient is -0.0945 (t=-11.72), and the result displays a significant negative correlation. The fact that the companies with a higher *CGRM* also have a higher *LnAF* suggests that these companies would often hire accountants capable of performing high-quality audit work by paying more audit fees to them, in order to achieve higher financial reporting quality. Moreover, given the Big 4's advantageous business reputation, their dependable audit quality also allows them to charge a larger amount of audit fees. In other words, it is noticeable that the Big 4's audit quality is considered trustworthy by the sample companies.

As regards the control variables, while a significant negative correlation exists between *Quick* and *ManaHol*, a significant positive correlation exists between *ROA*, *DE*, and *Control*. In view of this, when carrying out audits for companies with a lower *Quick*, a lower *ManaHol*, a higher *ROA*, a higher *DE*, and a higher *Control*, the accountants from the Big 4 would need to spend more time and cost to conduct more audit procedures, therefore charging more audit fees. As a result, Hypothesis 1 is supported.

Table 4 Corporate Governance Ranking Mechanisms and Audit Fees

		Total		Big4		Non-Big4	
Variables [a]	**Pred. Sign**	**Coef.**	***t*-value** [b]	**Coef.**	***t*-value**	**Coef.**	***t*-value**
CONSTANT		14.9321	197.37***	14.8986	187.90***	14.6039	71.17***
CGRM	–	-0.1027	-13.60**	-0.0945	-11.72***	-0.0620	-3.22
ROA	?	0.5816	3.73***	0.5567	3.40***	0.4635	1.19
Quick	?	-0.0073	-3.60***	-0.0075	-3.43***	-0.0045	-1.29**
DE	?	0.5117	6.32***	0.5163	6.09***	0.2766	1.27
SCED	?	-0.4608	-4.05	-0.5499	-4.72	-0.4958	-1.04
ManaHol	?	-0.0152	-3.05***	-0.0167	-3.25***	0.0030	0.17
Control	?	0.6069	7.41	0.6994	8.07***	0.3275	1.66**
IndDir		0.1108	0.97	0.1437	1.20	0.09331	0.31
Adj. R^2		16.39%		16.03%		12.38%	
Nobs.		1,872		1,691		181	

[a] *CGRM*: the corporate governance ranking mechanisms, the TEJ database divides the results of the corporate governance ranking mechanisms into seven levels, with 1 point for the top 5%, 2 point for 6% to 20 %, 3 point for 21% to 35%, and so on. 81% to 100% are given 7 point; *ROA*: return on assets; *Quick*: quick ratio; *DE*: debt ratio; *SCED*: the stock-control right minus the earnings-distribution right; *ManaHol*: manager shareholding ratio; *Control*: the number of seat-control directors divided by the total board size; *IndDir*: independent director ratio.

[b] Asterisks *, **, *** indicate two-tailed significance at the 0.10, 0.05, and 0.01 levels, respectively.

4.3.2 Regression Analysis of LnAF and CGRM – Different Business Life Cycle Stages

In examining the effects of corporate governance ranking on the audit fees in different business life cycle stages, the study divides the samples based on three life cycle stages: the growth stage, the maturity stage, and the decline stage, in order to find out whether different life cycle stages would bring about different effects on the audit fees. The empirical results suggest that in the maturity stage, there is a significant negative correlation between *CGRM*, whose estimated coefficient is -0.1041 (t=-11.37), and *LnAF*; that is to say, in the maturity stage, the companies showing great corporate governance performance would pay a greater amount of audit fees. On the other hand, as regards the sample companies in the decline stage, the estimated coefficient of *CGRM* is -0.1810 (t=-10.12), while a significant negative correlation can be observed. This is because to prevent a financial crisis, the managers of the companies in the decline stage would be induced to increase business earnings, which would then induce the management authorities to carry out earnings management and consequently produce a higher business risk. In this way, the accountants would have to spend extra time and cost to conduct more audit procedures and charge a larger amount of audit fees. Therefore, both H_{2-2} and H_{2-3} are supported.

Table 5 Corporate Governance Ranking Mechanisms and Audit Fees – Business Life Cycle Stages

Variables [a]	Pred. Sign	Growth Period Coef.	Growth Period *t*-value [b]	Mature Period Coef.	Mature Period *t*-value	Decline Period Coef.	Decline Period *t*-value
CONSTANT		14.7103	90.15***	14.9426	162.95***	15.3305	81.74***
CGRM	–	-0.0060	-0.34	-0.1041	-11.37***	-0.1810	-10.12***
ROA	?	0.2670	0.84	0.8030	4.29***	1.0993	2.23**
Quick	?	-0.0149	-2.45***	-0.0062	-2.49**	-0.0049	-1.21
DE	?	0.2295	1.29*	0.5130	5.23***	0.6529	3.30***
SCED	?	0.3139	-1.53*	-0.5073	-3.48***	-0.3045	-1.14
ManaHol	?	0.0051	0.51	-0.0125	-2.15**	-0.0632	-3.41***
Control	?	0.1069	0.50	0.5406	5.50***	0.5133	2.56***
IndDir		0.1745	0.59	0.1437	1.03	0.2035	0.81
Adj. R^2		5.94%		16.14%		34.94%	
Nobs.		262		1,292		318	

[a] *CGRM*: the corporate governance ranking mechanisms, the TEJ database divides the results of the corporate governance ranking mechanisms into seven levels, with 1 point for the top 5%, 2 point for 6% to 20 %, 3 point for 21% to 35%, and so on. 81% to 100% are given 7 point; *ROA*: return on assets; *Quick*: quick ratio; *DE*: debt ratio; *SCED*: the stock-control right minus the earnings-distribution right; *ManaHol*: manager shareholding ratio; *Control*: the number of seat-control directors divided by the total board size; *IndDir*: independent director ratio.

[b] Asterisks *, **, *** indicate two-tailed significance at the 0.10, 0.05, and 0.01 levels, respectively.

4.4 Additional Testing

4.4.1. Restatement and Corporate Governance Ranking Mechanisms

The quality of financial statement has become a social issue widely discussed. The rapidly changing economic environment these days and the complexity of accounting information have made it even more challenging for accountants to verify the quality of financial statement. In view of this, the study performs additional testing by considering restatement of financial statement as a proxy variable of financial statement quality. As shown in Table 6, the study divides the samples based on whether the sample is a client of one of the Big 4. The empirical findings indicate that since the companies audited by the Big 4 have better corporate governance ranking performance, are less prone to corporate governance-related problems, and have more comprehensive internal governance mechanisms, these companies are more likely to achieve high-quality audits and have a smaller chance of having to restate their financial statements.

Table 6 Restatement and Corporate Governance Ranking Mechanism

Variables [a]	Pred. Sign	Big4 Coef.	Big4 *z*-value [b]	Non-Big4 Coef.	Non-Big4 *z*-value
CONSTANT		-0.6101	-1.69**	-0.8860	-0.51
CGRM	–	-0.3348	-5.95***	-0.2810	-1.51
ROA	?	1.1660	1.49*	-0.1502	-0.06
Quick	?	-0.0255	-0.60	0.0025	0.08
DE	?	-0.2188	-0.62	-1.7674	-0.82
SCED	?	0.8867	2.28**	-5.3709	-0.64
ManaHol	?	-0.0441	-1.34*	0.0877	0.45
Control	?	0.2261	0.60	-0.7483	-0.43
IndDir		-1.3654	-2.58***	2.2515	0.77
Wald Test, F(p-value)		85.96 (0.00)		6.64 (57.63)	
Pseudo R^2		14.91%		17.28%	
Nobs.		1,691		181	

[a] *CGRM*: the corporate governance ranking mechanisms, the TEJ database divides the results of the corporate governance ranking mechanisms into seven levels, with 1 point for the top 5%, 2 point for 6% to 20 %, 3 point for 21% to 35%, and so on. 81% to 100% are given 7 point; *ROA*: return on assets; *Quick*: quick ratio; *DE*: debt ratio; *SCED*: the stock-control right minus the earnings-distribution right; *ManaHol*: manager shareholding ratio; *Control*: the number of seat-control directors divided by the total board size; *IndDir*: independent director ratio.

[b] Asterisks *, **, *** indicate two-ta

5. Conclusion and Suggestions

The study examines the listed companies in the Taiwan Stock Exchange Corporation (TWSE) from 2017 to 2019, for the purpose of gaining a deeper insight into the causes and results of the effects of corporate governance ranking in the listed companies in Taiwan on the companies' audit fees. Moreover, in view of the promotion of policies pertaining to corporate governance by both the government and the civil society organizations in recent years, the study also aims to contribute to the promotion of corporate governance in listed companies in Taiwan.

The sources of information include the Corporate Governance Center of the TWSE and the financial database maintained by the Taiwan Economic Journal (TEJ). The empirical findings suggest that a negative correlation exists between corporate governance ranking and audit fees, and that the Big 4 would generally be paid a larger amount of audit fees. What is more, while the companies in the maturity stage and have great corporate governance performance would pay a larger amount of audit fees, the companies in the decline stage would face a higher business risk. To prevent a financial crisis, the accountants of these companies would need to spend more time and cost to carry out more audit procedures, and therefore would charge a larger amount of audit fees.

The corporate governance ranking is performed by the Securities and Futures Institute, for the purpose of promoting corporate governance in the listed companies in Taiwan, helping the companies attain full business development, and boosting investor confidence. The future goals of the evaluation are described as follows: (1) Through the system's evaluation, indicator identification, and market mechanisms such as the feedback from the media, shareholders, and institutional investors, as well as the disclosure of evaluation results, it is expected that the companies would take the initiative in reflecting on their internal risks and fostering the culture of corporate governance, in order to achieve steady business development; (2) Through the evaluation, it is expected that the companies showing excellent corporate governance performance will be rewarded and serve as benchmarks to be followed; (3) Given that in recent years, corporate governance has been regarded worldwide as a popular and crucial subject of study, more and more international organizations have also been developing evaluation indicators based on the corporate governance principles, which can be effective in enhancing Taiwan's international visibility and image; (4) The design of the dimensions and indicators of the corporate governance ranking mechanisms takes reference from the corporate governance indicators and regulations at home and abroad. In this way, it is expected that companies and investors would place greater emphasis on the operation and performance of the evaluation system, and that the overall corporate governance level can be enhanced, while goals such as information disclosure, expansion of engagement, and improvement of capital market quality can be achieved as well.

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