Audit Committee, Supervisor System and Accounting Conservatism

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Abstract

Audit Committee aims to monitor the quality of financial reporting and reduce the asymmetry of information. If Audit Committee serves its purposes, the companies with Audit Committees are more able to comply with generally accepted accounting standards and improve the quality of financial reporting. This paper refers to *C-Score* as the indicator of the accounting conservatism to measure the quality of financial reporting. The research subjects are the companies listed on the Taiwan Stock Exchange and the Taipei Exchange in 2007~2011. The empirical results suggest that Audit Committee is related to accounting conservatism. This paper conducts tests on significance differences regarding the influence of the three corporate governance mechanisms in Taiwan on accounting conservatism. The results indicate that the companies with supervisors and independent directors show better accounting conservatism than the companies with supervisors only. The companies with Audit Committees have relatively neutral accounting principles. Their financial reporting comes with a higher quality and is more useful for decision making. The research findings can serve as a reference to regulators or competent authorities in the expansion of the Audit Committee System.

Keywords: Audit committee, Supervisor system, Accounting conservatism, Quality of financial statements

I.   Introduction

Functional committees aim to promote specialization in the board by assuming specific tasks and decisions with a high level of independence. The U.S. Securities and Exchange Commission and Blue Ribbon Committee pointed out in 1999 that Audit Committee is responsible for the evaluation of accounting policies, discretion over accounting decisions, appointment and supervision of external accountants, and monitoring of financial reporting quality. Ng and Tan (2003) suggest the higher incidence of controversial revenue recognition if Audit Committee is undermined and internal auditors do not have specific regulations to go by. Many studies indicate that the presence of experts in accounting and finance in Audit Committee enhances the quality of financial reporting (DeFond et al., 2005; Dhaliwal et al., 2010; Krishnan and Visvanathan, 2008). In other words, the more capable, powerful and independent the Audit Committee, the more effective it is to prevent erroneous statements or speculative financial reporting (Kim, Segal, Segal and Zang, 2012).

Basu (1997) posits that the influence of conservatism on accounting practices can be traced

back to at least 500 years ago. According to Watts (2003a, b), the purpose of accounting conservatism is to resolve information asymmetry between contract parties and asymmetric payouts between legal entities. It is an efficient mechanism developed to address moral hazards over limited horizons and limited liabilities (Kao, 2011). Before the recent amendment to the R.O.C. GAAP, accounting conservatism was defined as the adoption of conservative estimates for net assets and net earnings during the period within a reasonable scope, in the face of uncertainties. However, there is a shift from conservatism or prudence to neutrality according to the conceptual framework developed by the convergence committee driven by both the International Accounting Standards Board (ISAB) and the US Financial Accounting Standards Board (FASB). Accounting neutrality refers to the discretion required, in face of uncertainties, to avoid overestimates of assets and earnings or underestimates of liabilities and expenses. However, the use of discretion does not allow deliberate underestimate of assets or earnings or overestimate of liabilities and expenses so that financial reporting loses neutrality and hence liability. Beekes et al. (2004) notice that a high percentage of external directors in the UK- domiciled companies provides timeliness of bad news in earnings recognition. Krishnan and Visvanathan (2008) argue that Audit Committee's equipment of expertise in accounting of finance leads to better supervision of company's operations and reduced risks of litigation. Audit Committee members seek to protect their reputation capital and enhance accounting conservatism.

Since the implementation of the Audit Committee system in Taiwan in 2007, there have been a growing number of relevant studies discussing whether Audit Committee has served its intended functions. Some researchers explore the determinants of the voluntary establishment of Audit Committee and the factors that influence the decision quality of Audit Committee (Tsai, 2011; Chang, 2011). Some papers examine the composition of Audit Committee and the reasons for earnings management (Liu, 2012; Lin, 2012; Huang, 2011; Hsu, 2011; Shen, 2011; Chang, 2010), or information disclosure and earnings quality in the presence of Audit Committee (Li, 2011; Yu, 2011; Hung, 2011). There are no consistent conclusions so far. This paper hence seeks to examine the impact of Audit Committee on financial reporting quality from the perspective of accounting conservatism, in order to make up the insufficiency in literature.

This paper samples the companies listed on the Taiwan Stock Exchange and the Taipei Exchange in 2007~2011 and refers to the firm-year indicators of accounting conservatism constructed by Khan and Watts (2009) in the examination and validation of the three corporate governance structures currently seen in Taiwan. The empirical results suggest: (1) There is a positive correlation between Audit Committee and accounting conservatism; (2) The companies with supervisors and independent directors report stronger accounting

conservatism than the companies with supervisors only; (3) The companies with Audit Committees show a level of accounting conservatism closer to the mean firm-year values compared to the companies with supervisors and independent directors.

The remainder of this paper is organized as follows. Section II provides a review of the literature. Section III explains the research design including the data sources, sample selection, variable definitions and empirical model. The empirical results and analysis are presented in Section IV. Finally, the conclusions as well as some suggestions are presented in Section V.

II.   Literature Review and Hypothesis

Audit Committee is an operating committee as part of the board, with a purpose to monitor company accounting, financial reporting and auditing, as well as supervise auditors and financiers, internal and external. This system started when the U.S. Securities and Exchange Commission explored the concept of Audit Committee comprised of independent directors, in the wake of the closure of the drug company Mckesson and Robbins in 1940. The idea was to enhance auditors' independence and financial reporting credibility with chosen accounting firms to design the scope and operability (Birkett, 1986). In 1978, the New York Stock Exchange (NYSE) began to require listed companies to set up Audit Committees, with at least three independent directors. In 1998, the NYSE and the NASDAQ jointly formed Blue Ribbon Committee in order to strengthen the supervisory functions of Audit Committee and to improve the quality of financial reporting. In 1999, they suggested that Audit Committee should have at least three directors with financial knowledge and at least one should have expertise in accounting or finance, to ensure the monitoring of company operations and improve financial reporting and internal control quality. The U.S. Securities and Exchange Commission formally rectified the requirement in December 1999. This was followed with the rapid passing of the Sarbanes–Oxley Act of 2002 post numerous scandals in 2001~2002. Article 407 of the Sarbanes–Oxley Act stipulates that any company shall disclose whether they have at least one finance expert in its Audit Committee and provide reasons if not. It remains a contentious topic whether financial experts or accounting experts can provide maximum benefits.

In order to connect with the rest of the world, Taiwan amended its Securities and Exchange Act on January 11, 2006 as the legal basis for the establishment of independent directors and Audit Committee starting in 2007. According to the first subparagraph of Article 14-4 of the Securities and Exchange Act, "the companies which have issued shares pursuant to this law shall either establish Audit Committee or supervisors. However, competent authorities may require the setup of Audit Committee in lieu supervisors depending on firm sizes, business nature and other circumstances. Relevant requirements shall be set forth by competent

authorities." In other words, the establishment of Audit Committees can either be voluntary or mandatory. The Financial Supervisory Commission sought to promote the system at a gradual pace by first encouraging voluntary actions. It was hoped that the institution of audit committees can strengthen the corporate governance in Taiwan. Currently, Taiwan adopts a dual system in corporate governance, i.e. either the audit committee or supervisors. The short-term goal is to promote the audit committee system and the long-term goal is likely to replace supervisors with the audit committees. The mandatory requirements will be formulated depending on the performance of audit committees and the macro environment factors.

Audit committees and supervisors are different in functionality and composition. Supervisors aim to monitor company operations and may, at any time, examine the operational and financial affairs. However, most companies in Taiwan appoint major shareholders as directors and supervisors. As a result, the intended monitoring purposes are comprised. In contrast, audit committees are comprised of independent directors and at least one director shall be experts in accounting or finance. In theory, audit committees should be better equipped to improve corporate governance.

LaFond & Watts (2008) and Chi et al. (2009) suggest that accounting conservatism can serve as a corporate governance mechanism by mitigating information asymmetry. Watts (2003a, 2003b) indicates that accounting conservatism is an effect contractual mechanism that addresses the issues associated with moral hazards resultant from information and payoff asymmetry over limited horizons and limited liabilities. Chi and Wang (2010) prove that accounting conservatism reduces information asymmetry in emerging markets such as Taiwan. Cheng et al. (2011) support the value of accounting conservatism from the valuation perspectives and the consistency with the trends of accounting principle developments. In sum, most studies argue for the value of accounting conservatism from the contractual views and on the basis of usefulness in decision making. The measurement of accounting conservatism began from Basu (1997). He indicates that the requirements for earning recognition and the requirements for loss recognition are not the same, so as to achieve accounting conservatism. Generally accepted accounting rules require a more stringent set of parameters for the acknowledgement of good news than for the acknowledgement of bad news. As a consequence, the earnings reflect bad news much faster than good news. Basu defines this variance as the asymmetric timeliness of earnings and uses this to measure accounting conservatism. Ball & Shivakumar (2005) and Beaver & Ryan (2005) divide accounting conservatism into conditional and unconditional. Unconditional accounting conservatism (also known as balance sheet conservatism or ex-ante conservatism) refers to the consistency of accounting policies over the determination of recognized costs for assets. It

is an overall bias, depending on procedures, and not related to the reduction in book value or changes in market information.

After the amendment to the Securities and Exchange Act, there are three corporate governance structures in Taiwan: Audit Committee as the sole mechanism, or the dual system with supervisors, or the dual system with supervisors and independent directors. The burden of responsibilities and legal liabilities is the heaviest on the audit committee if serving two functions. As a result, this system has been proven to be ineffective. Is the single-ladder system of the Audit Committee designed by Securities and Exchange Act superior to the previous dual-ladder system? Do the companies with audit committees produce financial reports of better decision relevance compared to the companies with supervisors or with both supervisors and independent directors? This paper infers that audit committees are more effective in company supervision and as a result, the financial reporting comes with better quality and can faithfully reflect company operations. Thus, H1 is developed as follows:

H1: The establishment of audit committee is correlated with accounting conservatism.

The Taiwan Stock Exchange and the Taipei Exchange started in 2002 to require newly listed companies to establish two independent directors and one independent supervisor in order to reinforce corporate governance. Supervisors monitor the board with a focus on internal control and financial reporting. If supervisors can independently exercise their control and monitor functions, it will reduce the probability of affiliated party transactions at the expense of stakeholders (Yeh et al. 2002). However, the majority of companies in Taiwan are family businesses and supervisors are mostly affiliated parties. This is not a setup conducive to corporate governance. The independence of supervisors is the key to effective monitoring. Thus, H2 is developed as follows:

H2: The companies with both supervisors and independent directors report better accounting conservatism than the companies with only supervisors.

The establishment of audit committee is not 100% mandatory for listed companies in Taiwan. However, this paper believes that audit committee should be more effective in company monitoring than supervisors and independent directors infers that the companies with audit committee are likely to demonstrate stronger accounting conservatism compared to the companies with supervisors and independent directors only. Thus, H3 is developed as follows:

H3: The companies with audit committee report better accounting conservatism than the companies with both supervisors and independent directors.

III.   Research Design

III.1. Data sources and sample selection

This study assesses listed firms whose stocks are traded on the stock exchange and in the TWSE and over-the-counter (OTC) market from 2007 to 2011 in Taiwan, and excludes financial and insurance companies whose financial data cannot be considered as variables, for they make up a special industry and their accounting treatment approaches are different from those of ordinary industries.   All data sources is collect form TEJ Finance and TEJ Equity. The catachrestic of audit committee is form Market Observation Post System (MPOS). In addition, the firms which do not have relevant data based on financial reports or lack relevant disclosed data are also excluded. This paper screens the sample by following the procedures developed by Khan and Watts (2009). The companies with missing data, negative equity or share prices of below NT $1 are eliminated from the sample pool. The winsorization technique is used to handle extreme values of smaller than 1% and greater than 99% for firm sizes, market capitalization and debt ratios. This study collects data for 7,339 normal firms. In addition, the firms which do not have relevant data based on financial reports or lack relevant disclosed data are also excluded. The final sample consists of 6,048 observations. There are 187 observations setting audit committee.

III.2 The measurement of accounting conservatism (C-Score)

Khan and Watts (2009) develops C-Score as a measurement for accounting conservatism on the basis of the studies conducted by Basu (1997). C-Score is an improvement of the measurement developed by Basu (1997) and has been widely used as the indicator of accounting conservatism (Jayaraman 2012; Beatty and Liao 2011; Callen et al. 2011; Wittenberg-Moerman 2008). Scholars in Taiwan have proved the suitability of C-Score to Taiwanese companies. It is considered as a verifiable as other indicators (Wang et al., 2012). Therefore, this paper uses *C-Score* as the measurement for accounting conservatism. The measurement method of *C-Score* is as follows:

First, it is according Basu (1997) model:

$$\chi_{i,t} = \beta_1 + \beta_2 D_{i,t} + \beta_3 R_{i,t} + \beta_4 D_{i,t} R_{i,t} + \varepsilon_{i,t} \tag{1}$$

The variables are as follows. X is net income after tax of per share divide by stock price of per share for the year t firm i. R is return ratio of stock; the stock return ratio is calculate by buying in May year t and selling in April year t+1. D is dummy variables; R equal 1 when R is negative and the other is 0.

The timeless of good news (G-Score) is as follows:

$$G\text{-}Score = \beta_3 = \mu_1 + \mu_2 SIZE_{i,t} + \mu_3 MTB_{i,t} + \mu_4 LEV_{i,t} \tag{2}$$

The timeless of bad news (C-Score) is as follows:

$$C - Score = \beta_4 = \lambda_1 + \lambda_2 SIZE_{i,t} + \lambda_3 MTB_{i,t} + \lambda_4 LEV_{i,t} \qquad (3)$$

Let Eq. (2) to substitute into Eq. (3), and to become Eq. (4). The Eq. (4) is as follows:

$$\begin{aligned} \chi_{i,t} = \beta_1 + \beta_2 D_{i,t} + (\mu_1 + \mu_2 SIZE_{i,t} + \mu_3 MTB_{i,t} + \mu_4 LEV_{i,t})R_{i,t} \\ + (\lambda_1 + \lambda_2 SIZE_{i,t} + \lambda_3 MTB_{i,t} + \lambda_4 LEV_{i,t})D_{i,t}R_{i,t} + \varepsilon_{i,t} \end{aligned} \qquad (4)$$

The variables are as follows. SIZE is firm size; MTB is market-to-book ratio; LEV is leverage ratio of firm i. According to Khan and Watts（2009）control the firm characteristics. Rewrite the Eq. (4) to become Eq. (5). It is as follows:

$$\begin{aligned} \chi_{i,t} = \beta_1 + \beta_2 D_{i,t} + R_{i,t}(\mu_1 + \mu_2 SIZE_{i,t} + \mu_3 MTB_{i,t} + \mu_4 LEV_{i,t}) \\ + D_{i,t}R_{i,t}(\lambda_1 + \lambda_2 SIZE_{i,t} + \lambda_3 MTB_{i,t} + \lambda_4 LEV_{i,t}) \\ + (\delta_1 SIZE_{i,t} + \delta_2 MTB_{i,t} + \delta_3 LEV_{i,t}) \\ + D_{i,t}(\delta_4 SIZE_{i,t} + \delta_5 MTB_{i,t} + \delta_6 LEV_{i,t}) + \varepsilon_{i,t} \end{aligned} \qquad (5)$$

This paper produces a set of μ, λ regression coefficients for all the sampled companies each year by applying Eq. (5) regarding firm-years. These coefficients are then introduced to Eq. (2) and Eq. (3) to derive G-Score and C-Score for each year each year. *C-Score* is the value indicating accounting conservatism for the firm year.

III.3 Empirical model and the definition of variables

The purpose is to understand the correlation between the presence of audit committees and the conservatism of accounting, in order to validate H1. The empirical model (6) is as follows:

$$\begin{aligned} DC - Score_{i,t} = \alpha_1 + \alpha_2 AUDIT_{i,t} + \alpha_3 IS + \alpha_4 LEV + \alpha_5 SIZE + \alpha_6 GROWTH \\ + \alpha_7 OUTRATIO + \alpha_8 DIROWN + \alpha_9 BDMEET + \alpha_{10} INSTITUTION \\ + \alpha_{11} BIG4 + \varepsilon_{i,t} \end{aligned} \qquad (6)$$

D*C-Score* is dummy variable of accounting conservatism. It is estimate by Eq. (3) and Eq. (4). The definition of the other variables is as follows:

DC-Score: it equal to 1 when *C-Score* is higher than the average value of *C-Score*; the otherwise equal to 0.

AUDIT: it is a dummy variable of audit committee. AUDIT equal to 1 when the firm settings audit committee; the otherwise equal to 0.

IS: it is a dummy variable of independent director and supervisors system. IS equal to 1 when

the firm settings independent directors and supervisors system; the otherwise equal to 0.

OUTRATIO: it is independent director ratio. OUTRATIO equal to the numbers of independent directors divide by board size.

DIROWN: it is board shareholdings. DIROWN is measured with No. of shares held by board divide by No. of shares outstanding.

BDMEET: it is meeting frequency of board. BDMEET is take log of board meeting frequency.

INSTITUTION: Ownership by institution investor. INSTITUTION is measured with No. of shares held by institution investor divide by No. of shares outstanding.

BIG4 is dummy variable of big 4 CPA firm. BIG4 equal to 1 when firm audit by big 4 CPA firm; the otherwise equal to 0.

LEV is leverage ratio. LEV is measured with total lability divide by total assets.

SIZE is firm size. SIZE is take log of total assets.

GROWTH is growth ratio. GROWTH is measured with (net sales in year t minus net sales in year t-1) / (net sales in year t-1)

IV.   Empirical Results and Analysis

IV.1 Descriptive Statistics and Analysis

Table 1 summarizes the descriptive statistics of the variables concerning audit committees and accounting conservatism. There are a total of 6,048 observations. DC-Score is in the range from 0 to 1. The sample mean is 0.484 and the median is 0. The data is rightly skewed, indicating a heavy concentration of the values for accounting conservatism among listed companies in Taiwan at the level smaller than annual means. Among the sampled companies, 3.1% has audit committees (AUDIT) and 46.7% has supervisors and independent directors (IS). In terms of the control variables for firm characteristics, the mean debt ratio is 0.429, the median is 0.422 and the standard deviation is 0.194, indicative of the concentration of the distribution. The mean firm size is 6.704, the median is 6.600, and the standard deviation is 0.688. The data is rightly skewed, indicating the concentration of values at the high end. The mean growth is 0.066, the median is 0.035, and the standard deviation is 0.329. This data is also rightly skewed.

Table 1. Descriptive statistics (Full sample)

Variables [b]	Mean	Median	Min	Max	Std. Dev.
DC-Score	0.484	0	0	1	0.500
AUDIT	0.031	0	0	1	0.173
IS	0.467	0	0	1	0.499
OUTRATIO	0.156	0	0	1	0.166
DIROWN	0.231	0.195	0.048	0.697	0.141
BDMEET	0.866	0.845	0.602	1.362	0.175
INSTITUTION	1.930	0.056	0	40.600	6.412
BIG4	0.738	1	0	1	0.440
LEV	0.429	0.422	0.063	0.944	0.194
SIZE	6.704	6.600	5.417	8.944	0.688
GROWTH	0.066	0.035	-0.684	1.533	0.329

n=6,048 observations.

The definition of variable: *DC-Score*= higher accounting conservatism; AUDIT=audit committee; IS= independent director and supervisors system; OUTRATIO= independent director ratio; DIROWN= board shareholdings; BDMEET= meeting frequency of board; INSTITUTION= Ownership by institution investor; BIG4= auditing by big 4 CPA firm; LEV= leverage ratio; SIZE= firm size; GROWTH= growth ratio.

IV.2 Correlation Coefficients

Table 2 reports the Pearson correlation coefficients on accounting conservatism for the whole sample. The results indicate that DC-Score is negatively correlated with audit committees (AUDIT), firm sizes (SIZE), growth (GROWTH), board meetings frequency (BDMEET), external institutional holdings (INSTITUTION) and auditing by Big Four (BIG4). The frequency of board meetings (BDMEET) shows statistical significance under 10%. All the other variables are statistically significant under 1%. In other words, the larger the firm sizes, the higher the growth, the more frequent the board meetings and the greater the external institutional holdings, the lower the accounting conservatism values (vs. annual means). Meanwhile, DC-Score is positively correlated with independent directors (IS), debt ratios (LEV), independent director percentages (OUTRATIO) and directors' shareholdings (DIROWN) under 1% significance level. This is consistent with LaFond (2008) and Ahmed (2007) that the higher the holdings of external directors, the greater the accounting conservatism to mitigate agency costs.

Table 2. Pearson correlation coefficients (Full Sample)

Variables [a]	DC-Score	Audit	IS	LEV	Size	Growth	Outratio	Dirown	Bdmeet	Institution	BIG4
DC-Score	1										
Audit	-0.066 ***	1									
IS	0.050 ***	-0.067 ***	1								
LEV	0.116 ***	0.051 ***	-0.061 ***	1							
Size	-0.285 ***	0.183 ***	-0.158 ***	0.414 ***	1						
Growth	-0.048 ***	0.012	0.016	0.049 ***	0.067 ***	1					
Outratio	0.046 ***	0.219 ***	0.866 ***	-0.076 ***	-0.155 ***	0.017	1				
Dirown	0.076 ***	-0.039 ***	-0.014	-0.006	-0.111 ***	0.008	-0.021	1			
Bdmeet	-0.023 *	0.029 **	-0.006	0.243 ***	0.201 ***	0.035 ***	-0.025 **	-0.148 ** *	1		
Institution	-0.152 ***	0.036 ***	-0.006	0.033 **	0.184 ***	-0.033 **	-0.002	-0.008	0.049 ***	1	
BIG4	-0.056 ***	0.022 *	0.067 ***	0.018	0.133 ***	0.015	0.067 ***	-0.023 *	0.055 ***	0.055 ***	1

The definition of variables is the same as table 1.

IV.3 The C-Score of Khan and Watts (2009) model

Table 3 presents the estimated C-Scores based on the firm-year regression model developed by Khan and Watts (2009). C-Score captures the degree of share prices per year as a reflection of financial results. The analysis suggests a positive correlation between DxR coefficients and earnings. This means that bad news is reflected by earnings more timely than good news, on average. There is an inverse correlation between DxRxSIZE and earnings. This is in line with LaFond and Watts (2008) that the companies with poor accounting conservatism recognize good news faster and show a weaker consistency in the timing of information recognition. The direction of the coefficient for DxRxMTB is as expected, indicating that MTB has positive explanatory power over earnings. The direction of the coefficient for DxRxLEV is also as anticipated. However, the direction of the coefficient for RxLEV runs contrary with expectation. This suggests that the higher the leverage, the less pronounced the asymmetric recognition for good news and bad news. This is contrary with Khan and Watts (2009). The C-Score is the highest in 2009, at 0.5534 and the lowest in 2008, at 0.0571. The mean is 0.2302.

Table 3. The regression results of Khan and Watts (2009) model by year

	Average value of C-Score by year	Adj.R^2	F Value	P Value
2007	0.2114	0.307	34.273	0.000
2008	0.0571	0.285	32.126	0.000
2009	0.5534	0.256	28.739	0.000
2010	0.1903	0.291	35.167	0.000
2011	0.1397	0.339	45.176	0.000

IV.4 Audit Committees and Accounting Conservatism

This paper performs a logit regression on the factors that influence accounting conservatism. The empirical results of Eq. (1) are shown in Table 4. Among the ten independent variables, only five of them report statistical significance. Variance inflation factors (VIFs) of individual explanatory variables are listed at the bottom of the table. Generally speaking, a VIF value of greater than 5 indicates multicollinearity. A VIF of higher than 10 suggests serious multicollinearity. The VIF values for independent directors (IS) and independent director percentages (OUTRATO) are higher than 5 (indicative of strong multicollinearity) but all the variables report a VIF value of smaller than 2 (indicative of weak

multicollinearity). The coefficients for audit committees (AUDIT) and independent directors (IS) are 0.349 and 0.168, respectively. This is in line with the expectation for a positive correlation between audit committees and accounting conservatism. However, the p values of 0.190 and 0.326 are not statistically significant. Therefore, H1 is not supported.

Table 4. Audit Committees and *DC-Score* (Logistic regression analysis)

Variables [a]	Sign	Coefficient	P Value	VIF
Intercept		6.873 ***	0.000	
ADUIT	+	0.349	0.190	2.457
IS	+	0.168	0.326	8.918
LEV	+	3.611 ***	0.000	1.260
SIZE	?	-1.358 ***	0.000	1.427
GROWTH	-	-0.307 ***	0.000	1.009
OUTRATIO	+	0.588	0.261	9.338
DIROWN	+	0.637 ***	0.002	1.037
BDMEET	+	0.058	0.731	1.103
INSTITUTION	+	-0.049 ***	0.000	1.042
BIG4	+	-0.022	0.732	1.031
Chi-Square	1089.542 ***			

The definition of variables is the same as table 1.

The direction of the coefficient for external institutional holdings (INSTITUTION) is the opposite from the expectation and the correlation is statistically significant under 1% significance level. The results indicate that the contribution of high external institutional holdings to accounting conservatism is below the means (in contrary to the expectation for a higher than average contribution), as good news is reflected faster than bad news. The direction of the coefficient for the auditing by Big Four (BIG4) is also contrary to expectation, although not statistically significant. The results suggest the auditing by Big Four has no

bearing on the speed of recognition for good or bad news, as external auditing is ex-post in nature. Meanwhile, accounting principles focus on relevance, rather than the prioritization of recognition for bad news (as it was the case in the past). The coefficients for other variables are consistent with expectation. Both debt ratios (LEV) and director shareholdings (DIROWN) are positively correlated with *DC-Score under* 1% significance level. This means the higher the leverage or director ownership, the stronger accounting conservatism, as creditors and directors exercise their supervisory power. Firm sizes (SIZE) and growth (GROWTH) are negatively correlated with *DC-Score under* 1% significance level. This implies that the greater the firm scales or the higher the growth, the weaker the accounting conservatism, as good news is reflected faster than bad news.

IV.5 The difference test on *DC-Score* under different corporate governance mechanisms

This paper conducts a difference test on DC-Scores under different corporate government mechanisms to validate H2 and H3 (firm-year results in Table 5 and total results in Table 6). In Taiwan, there are three corporate governance structures, audit committees only (A), the coexistence of supervisors and independent directors (B), and supervisors only (C). The difference test results in Table 5 suggest that the DC-Scores for the years with supervisors and independent directors (B) are more significant than the DC-Scores for the years with supervisors only (C) except in years 2009~2010. The difference is statistically significant and hence H2 is supported. The companies with both supervisors and independent directors demonstrate stronger accounting conservatism than the companies with only supervisors. Table 6 shows the difference test results without firm years. The mean DC-Score is 0.510 for the companies with both supervisors and independent directors (B), whilst that for the companies with only supervisors (C) is 0.470. The difference tests on the means yield a t value of 3.068, and the p of 0.002, indicating significant variances. Hence, H2 is supported H2.

According to the difference test results in Table 5, the mean DC-Score for the companies with audit committees (A) is greater than that of the companies with both supervisors and independent directors (B) in 2009. However, the difference is not statistically significant and hence H3 is not supported. In fact, the numbers suggest that the companies with supervisors and independent directors demonstrate stronger accounting conservatism than the companies with audit committees. The difference test results in Table 6 without firm years indicate that the mean DC-Score for the companies with audit committees (A) is 0.299, whilst the mean DC-Score of the companies with both supervisors and independent directors (B) is 0.510. The t value of the difference tests on these two is -6.039 and the p is 0.000, indicating significant variances. This implies that the companies with supervisors and independent directors show

stronger accounting conservatism than the companies with audit committees in Taiwan.

Table 5. The difference test on *DC-Score* under different corporate governance mechanisms (by year)

	Average Value			t Value		
	A	B	C	A vs. B	B vs. C	A vs. C
2007	0.182 (n=11)	0.636 (n=519)	0.487 (n=597)	-3.668 ***	5.042 ***	-2.471 ***
2008	0.115 (n=26)	0.555 (n=542)	0.472 (n=604)	-6.530 ***	2.831 *	-5.316 ***
2009	0.694 (n=36)	0.677 (n=558)	0.660 (n=615)	0.212	0.627	0.422
2010	0.174 (n=46)	0.311 (n=586)	0.374 (n=617)	-2.291 ***	-2.336 ***	-3.354 ***
2011	0.265 (n=68)	0.403 (n=620)	0.355 (n=603)	-2.414 ***	1.743 ***	-1.573 ***

Table 6. The difference test on *DC-Score* under different corporate governance mechanisms (pooling data)

	Average Value			t Value		
	A	B	C	A vs. B	B vs. C	A vs. C
Full data	0.299 (n=187)	0.510 (n=2825)	0.470 (n=3036)	-6.039 ***	3.068 ***	-4.903 ***

Table 7 presents the difference tests on the two sub-groups, one group with audit committees and the other group without audit committees, in order to validate H1. The mean DC-Score

for the companies with audit committees is 0.300, and that for the companies without audit committees is 0.489. The difference tests yield a t value of -5.550 and the p value of 0.000, indicating significant variances. Therefore, H1 is supported. There is a correlation between audit committees and accounting conservatism. Meanwhile, the companies with audit committees tend to be more accounting neutral than those without audit committees.

Table 7. The difference test on *DC-Score* under setting audit committee

Average Value		t Value
Setting audit committee（A）	Non audit committee（B）	A vs. B
0.300	0.489	*** -5.550
(n=187)	(n=5861)	

V.   Conclusion and Suggestions

Financial reporting aims to provide useful information. Put differently, good quality in financial reporting assures the usefulness to decision making. Literature indicates that accounting conservatism serves as a corporate governance mechanism to mitigate information asymmetry and reduce agency costs. This study uses the C-Score developed by Khan and Watts (2009) as the proxy variable for accounting conservatism in the observation of the correlation between audit committees and accounting conservatism. This is followed with a comparison on the influence of audit committees and supervisors on accounting conservatism.

This paper finds a correlation between audit committees and accounting conservatism but the multiple regression analysis fails to conclude statistical significance. The univariate analysis yields significant evidence, possibly because of a small number of companies with audit committees. Hence, the evidence is not sufficient. Meanwhile, other corporate governance mechanisms can perform the functions intended for audit committees. As a result, the impact from audit committees on accounting conservatism is limited. This finding can serve as a reference to regulators in the promotion for audit committees. The focus should be placed on the strengthening of the audit committee system, so as to reflect its effectiveness on the quality of financial reporting.

This paper also conducts a difference tests on accounting conservatism under different corporate governance structures. The sensitivity analysis indicates that the companies with audit committees report stronger accounting conservatism. This supports H1. Meanwhile, a difference test suggests that the companies with both supervisors and independent directors

show higher accounting conservatism than the companies with only supervisors. The research findings suggest that the companies with audit companies demonstrate weaker accounting conservatism than the companies with supervisors and independent directors. This implies the companies with audit committees tend to exhibit accounting neutrality.

Some of the research hypotheses developed by this paper are supported with empirical evidence. The Taiwanese government is gradually expanding the applicability of mandatory requirements for audit committees. In fact, the Financial Supervisory Commission requires the companies with a capitalization of NT$ 2 billion or above to set up audit committees starting in 2017. Once this takes effect, the number of the companies with audit committees will increase dramatically. As the empirical findings by this paper suggest a correlation between audit committees and financial reporting quality, the competent authorities are advised to improve the functionality of audit committees with policy measures so as to strength corporate governance mechanism.

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