AUDIT COMMITTEE COMPENSATION AND EARNINGS MANAGEMENT AROUND M&A

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Abstract

This study examines the impact of equity compensation of audit committee members on the increasing monitoring role in earnings management around mergers and acquisitions (M&A). The results find support for the incentive alignment hypothesis, which suggests that compensating directors on audit committees with equity increases their monitoring role in reducing earnings management. The findings imply that the audit committee incentivized with equity compensation does due diligence increases the oversight responsibility over financial reporting and reduces the tendency for the firm to engage in earnings management around M&A. In addition, the results of this study support the incentive alignment hypothesis that when the post-acquisition profitability of the M&A is high, audit committee members are likely to increase their oversight responsibility over financial reporting during M&A.

Keywords: Audit Committee, Director Compensation, Incentive Compensation, M&A

Authors' individual contribution: Conceptualization — A.A.; Methodology — A.A.; Validation — H.-L.S.; Formal Analysis — A.A.; Writing — Original Draft — A.A.; Writing — Review & Editing — H.-L.S.; Supervision — H.-L.S.

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1. INTRODUCTION

The study examines the impact of equity compensation of audit committee members on the increasing monitoring role in reducing earnings management around mergers and acquisitions (M&A). The theory of the firm states that the principal or shareholder is the owner of the firm while the agent or management controls the operations of the firm (Jensen & Meckling, 1976). Proponents of agency theory argue that such separation results in agency conflicts in which the interests of shareholders and management do not align. To resolve such conflict, the principal incurs monitoring costs to ensure that the agent seeks the interest of the principal. One such monitoring cost comes in the form of compensation paid to the board of directors who have a fiduciary duty to monitor management to ensure that the interest of management aligns with the interest of shareholders.

The board operates through committees of which the audit committee is an important one. Unlike the other committees of the board, the audit committee has oversight responsibility over the financial reporting process of the firm and has a greater responsibility to constrain opportunistic reporting on the part of management (Badolato et al., 2014). It is crucial to ensure that audit committee members receive adequate incentives in compensation (Rickling & Sharma, 2017). As such, prior research stresses the need to adequately incentivize directors to effectively discharge their monitoring functions (Archambeault et al., 2008; Hillman & Dalziel, 2003). Several studies call for researchers to especially consider the association between audit committee members' compensation

and the quality of financial reporting (Carcello et al., 2011; Sharma et al., 2011).

Existing research on the relationship between audit committee compensation and the quality of financial reporting provides mixed results in the literature. Director compensation consists of cash and equity. Some researchers document insignificant associations between the cash compensation of audit committee members and fraudulent financial reporting as well as meeting or beating analyst's forecasts (Campbell et al., 2015; Persons, 2012). In contrast, others find a negative association between the cash compensation of audit committee members and the tendency for firms to beat forecasted earnings by a large margin (Rickling & Sharma, 2017). Furthermore, Campbell et al. (2015) find a positive association between equity compensation, measured by stock options, and the tendency for firms to meet or beat analyst forecasts. Other researchers (Sanders & Hambrick, 2007; Wiseman & Gomez-Mejia, 1998), argue that the use of equity to incentivize directors tends to influence the risk appetite of directors. As such, directors are likely to benefit economically at the expense of shareholders from the resulting increase in share price following manipulations of earnings.

Prior studies on the association between earnings management and M&A indicate a positive association, especially in the case of stock-for-stock M&A. Specifically, Erickson and Wang (1999) find that acquiring firms engage in income-increasing earnings management to reduce the number of shares they have to issue in stock-for-stock M&A as well as increasing the stock price. Although the literature documents an association between earnings management and audit committee compensation as well as between earnings management and M&A, the literature has not considered how the equity compensation of audit committee members affects the committee's monitoring role and affects earnings management behavior around M&A. This study intends to fill the gap by assessing the association between the equity compensation of audit committee members and earnings management before M&A. Specifically, this study provides empirical evidence to show that incentivizing audit committee directors with equity compensation increases their monitoring role and enhances the financial reporting quality by reducing earnings management within the settings of M&A. In addition, the findings of the study suggest that post-acquisition profitability affects the association between audit committee compensation and earnings management around M&A. In particular, post-acquisition profitability further enhances the monitoring effect of audit committees when audit committee members receive equity compensation. In contrast, although cash compensation of the audit committee is associated with an increase in earnings management, a better perspective of post-acquisition profitability moderates the negative impact of cash compensation on the monitoring effect of earning management.

The structure of this paper is as follows. Section 2 contains a review of the literature and hypotheses development. Subsequent Section 3 considers the methodology, while Section 4 presents a discussion of the results of the study. Section 5 summarizes and concludes the study and provides suggestions for future research.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Researchers argue that compensation incentivizes directors to effectively monitor the activities of management to ensure an interesting alignment between shareholders and management (Archambeault et al., 2008; Hillman & Dalziel, 2003). Given their essential role and enormous responsibility given to audit committee members for financial reporting, Rickling and Sharma (2017) stress the need to tie the compensation of audit committee members with the interest of shareholders. Like the board, the compensation of the audit committee consists of cash and equity compensation. Equity compensation entitles audit committee members to ownership rights in the firm, which aligns the interest of directors with shareholders. On the other hand, cash compensation does not grant directors ownership rights to the firm.

The literature identifies two theoretical perspectives that underlie the association between earnings management and the compensation of directors as a whole and the audit committee members as well. These perspectives from the executive compensation literature consider the association between the use of equity compensation and earnings management. The incentive alignment hypothesis posits that incentivizing directors with equity qualifies them as shareholders and increases their monitoring role. Based on the increased monitoring role, the expected oversight responsibility of the audit committee increases, the tendency for firms to engage in earnings management decreases, and thus the quality of financial reporting increases. As such, the incentive alignment hypothesis posits a negative association between the use of equity compensation and the tendency for the firm to engage in earnings management. Ye (2014) argues a negative association between the cash compensation of directors and the tendency for firms to engage in earnings management. This is because incentivizing directors with a high level of cash compensation negatively influences their monitoring role (Ye, 2014). Similarly, the findings from Adams and Ferreira (2008) show a negative association between incentivizing directors with a high amount of cash and board members' meeting attendance, suggesting support for the incentive alignment hypothesis.

The entrenchment hypothesis posits that compensating directors with equity increases their appetite for risk, which leads to their support for management decisions that will benefit the directors economically, even at the expense of shareholders (Sanders & Hambrick, 2007; Wiseman & Gomez-Mejia, 1998). Thus, the entrenchment hypothesis suggests a positive association between the equity compensation of directors and earnings management. On the other hand, given that cash compensation is fixed and unrelated to the performance of the firm in nature, directors compensated with cash are not likely to benefit economically from an increase in stock price associated with managing earnings. Hence,

the entrenchment hypothesis suggests an insignificant association between incentivizing directors with cash and the tendency for the firm to engage in earnings management.

The empirical results on the association between audit committee compensation and financial reporting quality are mixed. Some studies find support for the entrenchment hypothesis as they document an insignificant association between cash compensation and various measures of financial reporting quality. For instance, Campbell et al. (2015) and Persons (2012) find an insignificant association between the cash compensation of directors and fraudulent financial reporting as well as the tendency to meet analysts' forecasts. On the other hand, Rickling and Sharma (2017) document a negative association between the cash compensation of audit committee members and the likelihood of beating forecasted earnings by a large margin, supporting the incentive alignment hypothesis. Concerning equity compensation of directors, Campbell et al. (2015) record a positive relationship between the stock options compensation of directors and the likelihood of meeting or beating analyst forecasts, and thus offer support for the entrenchment hypothesis. Similarly, Persons (2012) finds support for the entrenchment hypothesis as he documents a positive association between incentivizing directors with stock options and fraudulent financial reporting.

Regarding the research on M&A, prior studies show a significant positive relationship between the likelihood of earnings management and M&A, especially when the M&A involves stock-for-stock consideration. Researchers who support this assertion argue that firms are likely to manage earnings with the aim to increase the share price and reduce the number of shares they have to trade in for a stock-for-stock transaction (Erickson & Wang, 1999; Lennox et al., 2018).

Given mixed results on the association between the compensation of directors and earnings management, this study examines the compensation of audit committee directors, earnings management, and M&A. We develop two hypotheses based on the incentive alignment hypothesis. Specifically, the study argues that if the incentive alignment hypothesis dominates, then incentivizing audit committee members with equity compensation will enhance their monitoring role and oversight responsibility over financial reporting around M&A. The hypothesis is stated as follows:

H1: There exists a significant negative association between the equity compensation of audit committees and earnings management around M&A.

Given that equity compensation relates to the performance of the firm, one will expect equity compensation to affect the monitoring role of directors when the stakes are high. From the entrenchment perspective, audit committee directors who receive equity compensation are likely to reduce their monitoring role around M&A when they anticipate higher post-acquisition performance. This is because they stand to benefit economically from the increase in stock price from inflated earnings during the pre-acquisition period. Thus, the entrenchment hypothesis suggests that post-acquisition profitability of M&A will adversely affect the association between the equity compensation of audit committee directors and earnings management. As such, the entrenchment hypothesis posits that the post-acquisition profitability of M&A positively moderates the association between the equity compensation of directors and earnings management.

On the other hand, the incentive alignment hypothesis asserts that incentivizing audit committee directors with equity increases their monitoring role and reduces earnings management. As such, one will expect the audit committee to increase its monitoring function over financial reporting when the stakes are much higher. Thus, the post-acquisition profitability of M&A will have a positive impact on the effective monitoring role of the audit committee, and enhance the quality of financial reporting by reducing earnings management. Hence, the incentive alignment posits that the post-acquisition performance of M&A moderates the relationship between equity compensation used to incentivize audit committee directors and earnings management. Given the opposing theoretical perspectives, this study argues that if the incentive alignment hypothesize dominates, then the testable hypothesis *H2* is as follows:

H2: The post-acquisition profitability of M&A enhances the negative association between the equity compensation of the audit committee and earnings management.

3. METHODOLOGY

The sample of this study includes M&A completed over the period 2006 to 2017, while the data on earnings management spans from 2005 to 2017. Consistent with previous studies (Deutsch et al., 2011; Certo et al., 2008), data on M&A is from the Securities Data Company (SDC). Data on director and chief executive officer (CEO) compensation is from the S&P ExecuComp. On the other hand, accounting and financial data come from Compustat, while data on director and CEO characteristics is from the Institutional Shareholder Services (ISS). The study considers acquisitions of both U.S. and non-U.S. target firms. The sample includes acquisitions of both public and private target firms. We focus on acquiring firms that are public companies and deals that comprise both completed and unconditional deals. In addition, this study considers acquisitions that have friendly deal attitudes only. Moreover, we limit the sample to transactions that have deal values greater than one million dollars. Following the approach of prior earnings management studies (Bé'dard et al., 2004; Dechow et al., 2012; Dechow et al., 1995; Xie et al., 2003), our sample does not include firms that operate in the financial or utility industries. This is because prior research (Macey & O'hara, 2003) indicates that the governance structures of such industries differ from firms in non-regulated industries. The final sample consists of deals that have a completion time that exceeds zero but excludes serial acquisitions. This study also does not include firms that undertake more than one M&A activity in a given year. Additionally, because the audit committee has oversight responsibility over financial reporting, we examine the compensation of audit committee members and not the board as a whole. Table 1 highlights a summary of the sample selection process.

Table 1. Sample selection

Sampling procedure	*Number of firms*
SDC data on M&A from 2006 to 2017	616,034
Uncompleted deals	143,019
Within-firm acquisitions	36,933
M&A with a negative completion time	114
M&A with zero completion time	296,848
Unfriendly M&A	5,089
Multiple M&A by a firm in the same year	57,082
Acquiring company identifiers not found in Compustat, ExecuComp, and ISS	64,123
Acquiring company identifiers not found in CRSP	3,111
Financial and utility firms	2,638
Firms with a transaction value of less than one million dollars	2,135
No audit committee member data	2,733
Final sample	2,209

The study uses an ordinary least squares regression method to examine the association between audit committee compensation and earnings management of acquiring firms around M&A. The regression models below are used to test the hypotheses:

$$DACC_{it-1} = \beta_0 + \beta_1 DCOMP_{it} + \beta_2 ACQS_{it} + \beta_3 DVZ_{it} + \beta_4 STKS_{it} + \beta_5 HTDVZ_{it} + \beta_6 AUDSZ_{it} + \beta_7 BDSZ_{it} + \beta_8 BDIND_{it} + \beta_9 BDAGE_{it} + \beta_{10} GEN_{it} + \beta_{11} TEN_{it} + \beta_{12} YRRET_{it} + \beta_{13} CEO\ DU_{it} + \beta_{14} CEO\ NOM_{it} + \beta_{15} BUSY_{it} + \beta_{16} INTERLOCK_{it} + \beta_{17} BDFINEXP_{it} + \beta_{18} FMSZ_{it} + \beta_{19} LEV_{it} + \beta_{20} MTB_{it} + \beta_{21} TOBQ_{it} + \beta_{22} CAPEX_{it} + \beta_{23} CEOFINEXP_{it} + \beta_{24} CEOAGE_{it} + \beta_{25} CEOTEN_{it} + \beta_{26} CEOCOMP_{it} + INDFE + YRFE + \varepsilon_{it} \quad (1)$$

$$DACC_{it-1} = \beta_0 + \beta_1 DCOMP_{it} + \beta_2 ROA_{it+1} + \beta_3 DCOMP_{it} * ROA_{it+1} + \beta_4 ACQS_{it} + \beta_5 DVZ_{it} + \beta_6 STKS_{it} + \beta_7 HTDVZ_{it} + \beta_8 AUDSZ_{it} + \beta_9 BDSZ_{it} + \beta_{10} BDIND_{it} + \beta_{11} BDAGE_{it} + \beta_{12} GEN_{it} + \beta_{13} TEN_{it} + \beta_{14} YRRET_{it} + \beta_{15} CEODU_{it} + \beta_{16} CEONOM_{it} + \beta_{17} BUSY_{it} + \beta_{18} INTERLOCK_{it} + \beta_{19} BDFINEXP_{it} + \beta_{20} FMSZ_{it} + \beta_{21} LEV_{it} + \beta_{22} MTB_{it} + \beta_{23} TOBQ_{it} + \beta_{24} CAPEX_{it} + \beta_{25} CEOFINEXP_{it} + \beta_{26} CEOAGE_{it} + \beta_{27} CEOTEN_{it} + \beta_{28} CEOCOMP_{it} + INDFE + YRFE + \varepsilon_{it} \quad (2)$$

The dependent variable is earnings management discretionary accruals (*DACC*). The measure of earnings management is abnormal accruals estimated using the modified Jones model, and the modified Jones model accounted for return on assets (ROA). Prior studies consider abnormal accruals as a proxy for earnings management within generally accepted accounting principles (GAAP) as well as a signal of irregularities (Dechow et al., 2012; Zhao & Chen, 2008). The study estimates accruals using the cash flow approach. The independent variable of interest for hypothesis *H1* is director compensation, made up of cash and equity compensation. The director compensation is measured by either the natural logarithm values or the ratio of equity and cash compensation to the total compensation of directors in the year of M&A. The other independent variable of interest for hypothesis *H2* is post-acquisition profitability, which is measured by the post-acquisition ROA. It is expected that higher profitability increases the stakes and influences the tendency to engage in earnings management.

In line with prior research, (Persons, 2012; Rickling & Sharma, 2017; Ye, 2014), this study controls for various variables that may impact earnings management and director compensation. Acquisition characteristics, governance characteristics and other firm characteristics are considered in the study as control variables. Acquisition characteristics include speed (ACQS), diversification (DVZ), high-tech industry (HTDVZ), and consideration used (STKS). Prior studies measure the speed by the completion time using the natural logarithm of the difference between the effective date of M&A and the announcement date of M&A (Grinstein & Hribar, 2004). A longer completion time suggests a slower speed, whereas a shorter completion time implies a higher speed. Louis and Sun (2016) indicate that the speed of M&A is associated with earnings management as they find that the management of acquiring firms is likely to increase the speed of M&A to hide opportunistic behaviors including inflated earnings. DVZ of M&A is controlled because prior research (Li et al., 2017) suggests that M&A involving firms in the same industry usually spans over a shorter period and could influence earnings management. The study also controls for M&A between firms in the high-technology industry consistent with prior research (Masulis et al., 2007). Given the competitive nature of business and the fast-paced nature of operations in the technology industry, acquisitions involving firms in the technology sector are expected to have shorter completion times, which may in turn increase earnings management as documented in the literature (Louis & Sun, 2016). The type of consideration used in the acquisition is also included as a control variable. Prior research indicates that acquiring firms have a greater incentive to inflate earnings when the M&A is financed with stock rather than cash (Lennox et al., 2018).

This study controls the governance characteristics associated with board and audit committee directors. Specifically, the board characteristics include board size (BdSz), board independence (BdInd), financial expertise of directors (BdFinExp), age of directors (BdAge), tenure (Ten), and the year to the retirement (YrRet) directors have to retire. Audit committee characteristics include audit committee size (AudSz), busyness (Busy) and gender (Gen) of audit committee directors. Researchers indicate that coordination problem characterizes larger boards than smaller boards (Ryan & Wiggins, 2004). Such an increased coordination problem could lead to a delay in getting directors together to ratify M&A. This would increase the completion time of

the acquisition and impact earnings management around M&A as Louis and Sun (2016) posit. Conversely, from the efficiency hypothesis, the larger board comprises people with diverse expertise and skills who can undertake due diligence within a shorter time with its attendant effect on earnings management (Louis & Sun, 2016). Board independence is used as a proxy for negotiation power. Consistent with prior research (Borokhovich et al., 1996; Deutsch et al., 2011), independent directors are outside directors who are not employees of the company nor related to the firm. Independent director is estimated as the ratio of independent directors to the total board size in any given year.

Financial expertise of directors is included because prior research indicates an association between the variable, especially for the audit committee, and earnings management (Xie et al., 2003). This study employs the narrow definition of financial expertise known in the auditing literature (Krishnan & Lee, 2009). A dummy variable is used to indicate the financial expertise of audit committee members, and it takes the value of one when an audit committee director has an accounting or finance background, otherwise zero. The age of directors is controlled because some researchers (Dah & Frye, 2017) suggest that older directors are likely to possess more knowledge about the operations of the firm tend to be risk-averse and are less likely to engage in earnings management. Tenure and the number of years directors have to retire are included as control variables based on prior research which suggests that directors are more likely to accumulate knowledge about the operations and activities of the firm (Vafeas, 2003). The longer directors stay with the firm, the better they are in a position to help management undertake better and value-enhancing M&A and earnings management activities of the firm.

Audit committee characteristics such as audit committee size, busyness, and gender of audit committee directors are included in the models. Prior literature (Ryan & Wiggins, 2004) suggests that the large size of the audit committee creates a coordination problem, which adversely affects the oversight responsibility of the committee over financial reporting and results in an increase in earnings management. Also, when audit committee directors are too busy serving on other boards, there is the likelihood that they not discharge the oversight responsibility over financial reporting efficiently, resulting in earnings management. On the other hand, audit committee directors who serve on other boards of major companies have the added advantage of gaining expertise and experience that helps them discharge their responsibilities efficiently and thus reduce earnings management. Prior studies (Butz & Lewis, 1996; Jianakoplos & Bernasek, 1998; Schubert, 2006) indicate that females are more conservative, ethically oriented, and risk-averse than males, while males tend to focus on their economic gains at the expense of shareholder value maximization as a means to achieve success in their career, implying that female directors are less likely to engage in earnings management than males.

To control managerial power and entrenchment, several CEO characteristics are included in the models. Consistent with earlier studies (Bebchuk & Fried, 2006), the presence of the CEO on the nominating committee (CeoNom) and CEO duality (CeoDu) are used as proxies for the bargaining power of the CEO and managerial entrenchment. Similarly, this study controls the tenure of CEOs (CeoTen). Prior research (DeAngelo, 1988; Kalyta, 2009; Pourciau, 1993; Ali & Zhang, 2015) suggests a positive association between earnings management and the earlier years of a CEO as well as the latter years of service. In addition, consistent with previous research (Huang et al., 2014), the study controls for the financial expertise (CeoFinExp) and the age of the CEO (CeoAge). Prior literature suggests that CEO age and experience significantly affect risk-taking and the tendency to manage earnings (Yim, 2013).

In addition, earlier studies (Aguir et al., 2014) posit that firm and industry factors may affect earnings management. Such factors include growth opportunities (market to book (MTB), Tobin's Q (TOBQ), capital expenditures (CapEx), profitability (ROA), firm size (FmSz), and leverage (Lev). Thus, the study controls for them. Ye (2014) indicates that firms with high leverage and low profitability have greater incentives to manage earnings. Hence, the need for an increased oversight role of the audit committee over financial reporting in such firms increases. In contrast, the political cost hypothesis suggests that larger firms have greater political visibility and are subject to greater scrutiny from external stakeholders. Such monitoring may reduce earnings management and decrease the monitoring requirement of the audit committee (Ye, 2014). On the other hand, larger firms may try to reduce their political visibility by engaging in income-decreasing earnings management. Such tendencies would require greater audit committee monitoring. Similarly, the literature indicates that investment opportunities and the need for monitoring impact director compensation. Furthermore, studies indicate that firms with high investment and growth opportunities require a greater amount of directors' effort to monitor the activities of management and gather information (McClain, 2011). Accordingly, the above firm-specific and industry variables are included in the models.

Table A.1, Appendix A presents a list of variables used in the study and their definitions.

4. RESULTS AND DISCUSSION

Table 2 contains the descriptive statistics and shows the mean, median, minimum, maximum, and standard deviation of the variables.

Table 2. Descriptive statistics

Variable	*N*	*Mean*	*Median*	*Minimum*	*Maximum*	*Std. dev.*
Acqs	2209	61.1191	43	8	230	52.0236
DACC	2209	0.0033	0.0142	–0.6655	0.3424	0.0876
AudSz	2209	3.8855	4	1	7	0.9565
DCompCash	2209	79.2132	78.7500	0.0270	150.0000	34.1611
DCompEqt	2209	123.7998	115.2250	1.0190	263.8880	66.9967
Stks	2209	0.1639	0	0	1	0.3702
Dvz	2209	0.3753	0	0	1	0.4843
HiDvz	2209	0.6369	1	0	1	0.4810
BdSz	2209	9.6012	9	7	16	1.9740
BdInd	2209	0.8002	0.8182	0.5714	0.9167	0.0970
BdAge	2209	63.0072	63	50	76	7.2129
Gen	2209	0.1471	0	0	1	0.3543
Ten	2209	7.9298	7	1	23	6.0309
YrRet	2209	1.6057	1	1	4	0.8415
CeoDu	2209	0.0222	0	0	1	0.1473
CeoNom	2209	0.0204	0	0	1	0.1413
Busy	2209	0.9973	1	0	6	1.1136
Interlock	2209	0.0005	0	0	1	0.0213
BdFinExp	2209	0.2200	0	0	1	0.4143
FmSz	2209	3.5695	3.5546	2.6400	5.1105	0.5915
Lev	2209	0.5370	0.5546	0.2280	0.9025	0.1635
ROA	2209	0.0961	0.0920	0.0039	0.1921	0.0500
ROA_{t+1}	2209	0.0887	0.0840	–0.1713	0.6136	0.0730
ROE	2209	0.1273	0.1118	–0.1025	0.3832	0.1183
ROE_{t+1}	2209	0.1074	0.1015	–0.1034	0.3390	0.1151
MTB	2209	2.9175	2.4087	0.1341	7.5510	1.8199
TobQ	2209	1.4538	1.3028	0.2415	2.9770	0.7167
CapEx	2209	0.0346	0.0269	0.0006	0.1072	0.0270
CeoFinExp	2209	0.0041	0	0	1	0.0637
CeoAge	2209	61.0014	61	51	73	6.1963
CeoTen	2209	6.3332	5	1	21	5.1124
CeoEqt	2209	4,016.6000	3,190.1800	43.0880	1,1679.1800	3,265.2800

Evidence from Table 2 indicates that directors of sample firms receive more equity compensation than cash consideration in the sample period. The average equity compensation of directors is about $124,000 and the average cash compensation is about $79,000. Sample firms on average completed merger and acquisition transactions in 61 days with a minimum completion time of eight days and a maximum of 230 days. Furthermore, evidence from Table 2 indicates that about 38% of the M&A were diversified acquisitions, while 64% of the M&A took place between diversified high-technology firms. The results also indicate that the sample firms used more cash than stock to finance M&A. Specifically, only 16% of the sample firms financed M&A with only stock-for-stock consideration. Furthermore, the mean equity compensation of CEOs was about $4,016,600.

Concerning governance characteristics of sample firms, the results reveal that on average, ten directors serve on a board with a minimum board size of seven and a maximum of 16 directors. The average number of directors on audit committees is four, with a minimum and maximum audit committee size of one and seven directors, respectively. Also, the results indicate that on average, 80% of directors are independent directors with a minimum and maximum of 57% and 92%, respectively. Furthermore, among the directors who serve on the board, the results indicate that females constitute only about 15%, an indication that most boards are male-dominated and in line with the findings of prior research. Directors who possess finance or accounting qualifications constitute about 22% of the board of directors, while CEOs with such qualifications constitute less than 1% of sample firms. The results further reveal that the average number of other major companies on which the directors of audit committees serve is one with a maximum of six other directorships. The results also show that the interlocking relationships among directors of sample firms are minimal. The average age of directors is 63 years old, whereas that of CEOs is 61 years old. The youngest director serving on the board is 50 years old, whereas the oldest director is 76 years old. Similarly, the youngest CEO is 51 years old, while the oldest CEO is 73 years old in the sample. Regarding the tenure of directors, evidence from Table 2 shows that directors serve on the board for an average period of eight years with a minimum and maximum of one year and 23 years, respectively. Considering their age, the directors of the sample firms have an average of less than two years to retire with a maximum of four years. In comparison, the average time spent serving as CEO is six years with a minimum and maximum of one year and 21 years, respectively. In addition, less than 3% of sample firms have a CEO who doubles as the chairman of the board or serves on the nominating committee. Concerning firm characteristics, firms finance their operations with about 54% debt on the average and minimum and maximum of 23% and 90%, respectively. Likewise, the results show an average firm size of $36 million worth of total assets with a minimum of $14 million and maximum values of $166 million worth of total assets. Concerning performance, the results indicate an average 9% ROA with a minimum of 0.39% and a maximum of 19.21%. The evidence shows a mean market-to-book ratio of 2.9, with a minimum and maximum of 0.13 and 7.55, respectively. Similarly, a mean Tobin's Q of 1.45 with a minimum and maximum of 0.24 and 2.98, respectively. The spending on capital expenditure of sample firms constitutes less than 4% of total assets with a minimum and maximum of 0.06% and 10.72%, respectively.

Table B.1, Appendix B presents the correlation matrix of variables. Particularly, it shows a significant negative relationship between earnings management (*DACC*) and equity compensation of audit committees (*DCompEqt*) as hypothesized.

Table C.1, Appendix C presents the regression results of the relationship between the compensation of audit committees and earnings management associated with M&A. The dependent variable is *DACC*, estimated using the modified Jones model as well as the modified Jones model adjusted for ROA. Model 1 contains the results of the modified Jones model, while Model 2 presents the results of the modified Jones model adjusted for ROA. The independent variables of interest are the compensation of directors on audit committees, post-acquisition ROA, and the interaction terms of post-acquisition ROA and audit committee compensation. Director compensation of the audit committee includes cash and equity compensation (*DCompCash* and *DCompEqt*). The study uses three measures of director compensation, namely the absolute value, natural logarithm value, and the ratio of cash or equity to total compensation. Panel A shows the results when the measure of cash or equity compensation is in absolute value.

Table C.1 contains the results of regressing earnings management on the equity compensation of the audit committee around M&A. The dependent variable is *DACC*, and the independent variables include the cash and equity compensation of directors, post-acquisition performance, other variables to control for acquisition, governance, firm characteristics, and the year and industry fixed effects. Panel A uses the winsorized values of cash and equity compensation of the audit committee. Panel B uses the natural logarithm of cash and equity compensation of the audit committee. Panel C uses the ratios of cash and equity to the total compensation of the audit committee. Model 1 contains the results of using the modified Jones model to estimate *DACC*, while Model 2 presents the results of using the modified Jones model adjusted for ROA to estimate *DACC*.

On the other hand, Panel B presents the results of using the natural logarithm measure of cash or equity compensation, while Panel C contains the results of the ratio of cash or equity to total compensation. The study controls acquisition characteristics, governance, and firm characteristics, as well as the year and industry fixed effects. Evidence from the correlation Table 4 does not show serious issues with multicollinearity. Likewise, results from the variance inflation factor (VIF) estimated as part of the regression have values less than the threshold of ten. Hence, the study does not show concerns with multicollinearity.

The results from Model 2 of Panel A of Table C.1 show a marginally significant negative association between the completion time for M&A and *DACC* estimated using the modified Jones model adjusted for firm profitability. The results imply a positive relationship between the speed of M&A and the tendency to manage earnings. Thus, the higher speed of M&A may reduce the due diligence audit committee members make and thus account for the increase in earnings management. The finding supports the findings of Louis and Sun (2016) which posit that management is likely to speed up M&A to avoid exposure to inflated earnings. Furthermore, evidence from Model 1 of Panel A of Table C.1 indicates a significant positive association between high technology diversified M&A and earnings management estimated using the modified Jones model. The results imply that M&A that involves high-technology firms in diversified industries is associated with an increase in earnings management. The results remain marginally significant with the other measures of directors' compensation, as documented in Panel B and Panel C.

The results from Panel C of Table C.1 show a significant positive association between earnings management and the ratio of cash compensation to the total compensation of audit committees. The findings imply that an increase in the cash compensation of audit committee members relative to their total compensation leads to a decrease in the monitoring role of the audit committee. The change in the monitoring role decreases the oversight responsibility over financial reporting, and it results in an increase in earnings management irrespective of the measures of earnings management, as evident from Model 1 and Model 2. Theoretically, the finding supports the reciprocity hypothesis that posits a positive association between the cash compensation of directors and earnings management. Thus, the results suggest that as audit committee members receive higher cash compensation, they reciprocate the gesture with a reduction in their monitoring of the activities of earnings management. Such development leads to a decline in the effective oversight role of the audit committee over financial reporting and results in an increase in earnings management with the attendant decrease in financial reporting quality. The result, however, is inconsistent with the findings of Persons (2012) and Campbell et al. (2015) which find an insignificant association between the cash compensation of directors and financial fraud as well as meeting or beating analyst forecasts. In addition, the result is inconsistent with the findings of a negative association between the cash compensation of audit committee directors and abnormal earnings as documented in Ye (2014).

On the other hand, results from Panel A and Panel B of Table C.1 show a significant negative relationship between the equity compensation of the audit committee and earnings management estimated using the modified Jones model and the modified Jones model adjusted for ROA. The results imply that incentivizing audit committee members with equity increases their monitoring role with a resultant increase in their oversight responsibility over financial reporting. This leads to a reduction in earnings management of the firm around M&A. The results hold for both the raw compensation value and the natural logarithm of equity compensation of the audit committee but not the ratio of equity to total compensation. The negative association between the equity compensation of the audit committee and earnings management provides support for hypothesis *H1* and the incentive alignment hypothesis that equity compensation increases the monitoring role of the audit committee, and thus enhances financial reporting quality by reducing earnings management. The results are inconsistent with the findings of

prior studies (Campbell et al., 2015; Persons, 2012) which document a positive association between equity compensation of directors and earnings management. The difference in the results may stem from the measure of equity compensation used in this study compared to other studies. While prior studies consider the association between the use of stock options and earnings management, this study focuses on the bigger picture and considers total equity compensation as a whole.

The results from Panel C of Table C.1 indicate a significant negative association between the post-acquisition profitability of M&A and pre-acquisition earnings management. The results suggest that firms are less likely to engage in earnings management when the M&A is profitable. The evidence from Table C.1 also shows a significant negative association between the interaction term of the cash compensation of the audit committee and the post-acquisition profitability of M&A. The findings suggest that the post-acquisition ROA of the acquiring firm negatively moderates the association between the cash compensation of the audit committee and the earnings management around M&A. The finding implies that though the cash compensation of the audit committee is associated with an increase in earnings management, the profitability of the M&A positively influences the monitoring role of audit committee directors and increases the oversight responsibility of directors over financial reporting, thus, resulting in a decrease in earnings management. The results are consistent for all the measures of the cash compensation of the audit committee regardless of the measures of earnings management.

Similarly, the results in Table C.1 Panel C indicate a significant negative relationship between earnings management and the interaction term of equity compensation of audit committee and post-acquisition ROA. The findings suggest that the post-acquisition profitability of firms adversely moderates the relationship between the equity compensation of the audit committee and earnings management. The result is an indication that as much as the equity compensation used to incentivize audit committee directors to increase their monitoring role, the profitability of the M&A positively affects their monitoring role and oversight responsibility over financial reporting. The findings imply that the post-acquisition profitability of M&A increases the oversight responsibility of audit committee directors over financial reporting and leads to a decrease in earnings management regardless of both cash and equity compensation given to audit committee directors.

For governance characteristics, the results from Table C.1 show a significant positive association between audit committee size and earnings management. The results imply that an increase in the number of directors on the audit committee of the firm is associated with an increase in earnings management. The finding lends support to the coordination problem that characterizes larger boards as documented in the literature (Ryan & Wiggins, 2004). Thus, the large size of the audit committee creates coordination problems, which adversely affects the oversight responsibility of the committee over financial reporting and results in an increase in earnings management. The results hold for all the measures of directors' compensation as well as earnings management and thus, offer robustness for the hypothesis testing.

Table C.1 also shows a significant negative association between board size and earnings management, implying that an increase in board size leads to a decrease in earnings management. The results offer support for the efficiency hypothesis, which suggests that large boards are characterized by varied expertise and an increase in the efficiency of the monitoring role, thereby reducing the tendency for earnings management. Moreover, the results show a significant negative association between the gender of audit committee members and earnings management. Specifically, having more females serving on the audit committee increases the monitoring role of the committee as well as the committee's oversight responsibility over financial reporting, thus, accounting for the decrease in earnings management. The results are consistent with findings in the literature that females are more ethically oriented, risk-averse and conservative than males (Butz & Lewis, 1996; Schubert, 2006).

Furthermore, the results reveal a positive association between board business and earnings management. In other words, as audit committee members serve on more boards of other major companies, the time they spend on the company reduces, and earnings management increases. This reduces the efficiency in discharging their oversight responsibility for financial reporting and accounts for the increase in earnings management. The results support the busyness hypothesis that posits board busyness reduces the effective monitoring role of directors. The results hold for all estimates of earnings management and director compensation, offering robustness for the findings.

The study documents a significant positive relationship between firm size and earnings management. Thus, an increase in the size of the firm leads to an increase in earnings management. The results suggest that as the firm size increases, it becomes more difficult for the audit committee to discharge their oversight responsibility for financial reporting effectively; hence, it is associated with an increase in earnings management. The finding supports the political cost hypothesis that suggests larger firms are more likely to engage in earnings management to reduce their political visibility. The finding is robust to all measures of earnings management and director compensation. Also, the results indicate a significant negative association between leverage and earnings management. The findings indicate that an increase in leverage increases the risk level of the firm and offers monitoring, which reduces earnings management. However, the finding does not support the debt covenant hypothesis, which posits that firms close to debt covenant violations are likely to engage in earnings management. Given that sample firms in the study have a moderate level of debt, it is not surprising that firms are not close to violating debt covenants and as such, have less incentive to manage earnings.

The results further show a positive association between the market-to-book ratio of the firm and earnings management. The findings imply that as firms try to take advantage of increased investment opportunities available to them through M&A,

the likelihood of firms engaging in earnings management increases. The findings remain robust for all measures of earnings management. Similarly, evidence from Table C.1 indicates a significant positive relationship between the capital expenditure ratio of the firm and earnings management. The findings imply that as the need for monitoring of the firm increases around M&A, the likelihood for firms to engage in earnings management increases. The results from Model 1 and Model 2 in Panel A, Panel B, and Panel C show robustness for the findings. In addition, the results from Table C.1 indicate a marginally significant negative association between the financial expertise of CEOs and earnings management. The finding implies that CEOs who have finance or accounting expertise are less likely to engage in earnings management.

5. CONCLUSION

This study examines the impact of equity compensation of audit committee members on the increasing monitoring role in earnings management around M&A. Different from previous studies, which investigate the impact of equity compensation on the monitoring role of the board, the study focuses on the equity compensation of the audit committee. Specifically, the audit committee has the ultimate oversight responsibility for financial reporting and the influence on earning management. The results find support for the incentive alignment hypothesis, which suggests that compensating directors on audit committees with equity increases their monitoring role in reducing earnings management. Specifically, the findings of the study indicate that equity compensation helps directors on audit committees to discharge their oversight role in financial reporting effectively and results in a decline in earnings management prior to M&A. The findings imply that the audit committee incentivized with equity compensation does due diligence increases the oversight responsibility over financial reporting and reduces the tendency for the firm to engage in earnings management around M&A. In addition, according to the incentive alignment hypothesis, equity compensation affects the monitoring role of directors when the stakes are high. The results of this study support the incentive alignment hypothesis that when the post-acquisition profitability of the M&A is high, audit committee members are likely to increase their oversight responsibility over financial reporting during M&A.

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APPENDIX A

Table A.1. Variable definitions

Variable	*Definition*
DACC	Discretionary accrual for firm *i* in year *t–1*.
$Acqs_{it}$	The acquisition speed of firm *i* in year *t*. It is measured as the difference between the completion date and the date of the announcement of the acquisition
$AudSz_{it}$	Audit committee size for firm *i* in year *t*. It is the total number of people who serve on the audit committee in any given year
DCompCash	Director cash compensation of firm *i* in year *t*
DCompEqt	Director equity compensation of firm *i* in year *t*. It includes stock and options
$Stks_{it}$	Stock for stock consideration of firm *i* in year *t*. It is estimated using a dummy variable that one when the considerations offered and sought acquisition are stock, zero otherwise
DVZ_{it}	Diversified acquisition for firm *i* in year *t*. It is estimated using a dummy variable that when the target firm and the acquiring firm do not have the same two-digit system of international certification (SIC), zero otherwise
$HiDvz_{it}$	High-tech diversified acquisition for firm *i* in year *t*. It is estimated using a dummy variable that when the target firm and the acquiring firm are both not technology firms, zero otherwise
$BdSz_{it}$	Board size for firm *i* in year *t*. It is the total number of people who serve on the board in any given year
$BdInd_{it}$	Board independence of firm *i* in year *t*. It is the ratio of inside directors to the number of directors who serve on the board each year
$BdAge_{it}$	Age, the age of board members for firm *i* in year *t*
Gen_{it}	Gender of the board of directors. It is a dummy variable that equals one if the director of the audit committee *i* is a female in year *t*, zero otherwise
Ten_{it}	Tenure of director of a firm *i* in year *t*. It is estimated as the difference between the fiscal year of the acquisition and the year the director began service on the board
$YrRet_{it}$	Year to the retirement of director of firm *i* in year *t*. It is estimated as the difference between the fiscal year of the acquisition and the year the director's service on the board ends
$CeoDu_{it}$	CEO duality. It is estimated using a dummy variable that equals one if the CEO of firm *i* also doubles as the chairman of the board of directors in year *t*, zero otherwise
$CeoNom_{it}$	CEO nominating committee member. It is estimated using a dummy variable that equals one if the CEO of firm *i* serves on the nominating committee of the board of directors in year *t*, zero otherwise
$Busy_{it}$	Board busyness. It is the number of other major company boards a director of the audit committee *i* serve on in year *t*
$Interlock_{it}$	Board interlocking relationship. It is a dummy variable that equals one if the directors of firm *i* serve on each other's board in year *t*, zero otherwise
$BdFinExp_{it}$	The financial expertise of the board of directors. It is a dummy variable that equals one if the board of directors of the firm *i* has financial expertise in year *t*, zero otherwise
$FmSz_{it}$	Size of firm *i* in year *t*. It is the natural logarithm of total assets
Lev_{it}	Leverage of firm *i* in year *t*. It is the ratio of liabilities to total assets
ROA_{it}	Return on assets of firm *i* in year *t*. It is the percentage of earnings before interest and tax to total assets
ROA_{it+1}	One-year post-acquisition return on assets of firm *i* in year *t+1*. It is the percentage of earnings before interest and tax to total assets one year after completion of the acquisition
ROE_{it}	Return on equity of firm *i* in year *t*. It is the percentage of earnings to shareholder's equity
ROE_{it+1}	One-year post-acquisition return on equity of firm *i* in year *t+1*. It is the percentage of earnings to shareholder's equity one year after completion of the acquisition
MTB_{it}	Market to book ratio of firm *i* in year *t*. It is the ratio of the market value of equity to the book value of equity
$TobQ_{it}$	Tobin's Q of firm *i* in year *t*. It is the ratio of the sum of the market value of equity and the book value of debt to total assets
$CapEx_{it}$	Capital expenditures of firm *i* in year *t*. It is the ratio of capital expenditures to total assets
$CeoFinExp_{it}$	CEO financial expertise. It is measured using a dummy variable that equals one if the CEO of firm *i* has financial expertise in year *t*, and zero otherwise
$CeoAge_{it}$	CEO age. The age of the CEO of firm *i* in year *t*
$CeoTen_{it}$	Tenure of CEO of firm *i* in year *t*. It is estimated as the difference between the fiscal year of the acquisition and the year the CEO began service on the board
CeoEqt	CEO's equity compensation for firm *i* in year *t*
IndFE	Industry fixed effects
YrFE	Year fixed effects
ε_{it}	The error terms

APPENDIX B

Table B.1. Correlation: Panel A

	Acqs	*DACC*	*AudSz*	*DCompCash*	*DCompEqt*	*Stks*	*Dvz*	*HiDvz*	*BdSz*	*BdInd*
Acqs	1									
DACC	-0.0026	1								
AudSz	-0.0582***	0.0994***	1							
DCompCash	0.0476**	0.01942	0.02178	1						
DCompEqt	0.0685***	-0.0457**	0.00627	0.1276***	1					
Stks	-0.0384*	-0.0525**	-0.0531**	-0.02052	0.0111	1				
Dvz	-0.0961***	0.01795	0.00875	0.0384*	0.02083	0.01048	1			
HiDvz	-0.1093***	0.0430**	0.0582***	-0.0832***	0.0760***	-0.1184***	-0.00004	1		
BdSz	0.1147***	0.02638	0.02041	0.1857***	0.0573***	0.0517**	-0.03002	-0.0677***	1	
BdInd	0.1423***	-0.00448	-0.0413*	0.159***	0.0981***	0.03302	0.0628***	-0.0846***	0.1488***	1
BdAge	-0.0570***	0.00347	-0.0117	0.1393***	-0.00439	0.01567	0.02697	-0.0418**	0.02603	0.0365*
Gen	-0.00159	-0.02913	0.0404*	0.0571***	0.0379*	0.01291	-0.01575	-0.0319	0.0833***	0.0748***
Ten	-0.0389*	-0.01729	-0.0550***	0.0772***	-0.0414*	0.01813	0.00902	-0.00301	-0.03088	-0.0581***
YrRet	-0.0853***	-0.0482**	-0.00436	-0.1746***	-0.1404***	0.02433	-0.00237	0.01989	-0.0934***	-0.1408***
CeoDu	0.01437	-0.02913	-0.01089	-0.00852	-0.0479***	-0.00855	0.0356*	-0.0333	-0.00383	-0.01396
CeoNom	0.02887	-0.02462	-0.02294	0.00139	-0.02145	-0.0119	0.03383	0.00225	-0.01632	-0.00268
Busy	0.03472	0.0399*	0.01161	0.0854***	0.0824***	0.02195	0.0825***	-0.01199	0.1083***	0.0815***
Interlock	-0.0111	-0.00582	0.00255	-0.02911	-0.02192	-0.00942	-0.01649	0.01607	-0.00648	-0.0502**
BdFinExp	-0.01483	0.02117	0.00076	0.1478***	0.0987***	-0.01666	0.00364	-0.02625	-0.0455**	0.0647***
FmSz	0.2131***	0.0626***	-0.0658***	0.4422***	0.2737***	0.02386	0.0780***	-0.1705***	0.5309***	0.2685***
ROA	-0.01119	-0.0918***	-0.1345***	-0.0499**	0.1153***	0.1113***	0.0439**	-0.0744***	0.0860***	-0.0422**
ROA_{t+1}	0.0370*	-0.0792***	-0.0795***	-0.03078	0.0789***	0.1190***	0.00311	-0.0592***	0.1068***	0.01647
ROE	0.0442**	-0.0642***	-0.1377***	0.0424**	0.1452***	0.0721***	0.0669***	-0.1564***	0.1498***	0.0396*
ROE_{t+1}	0.0838***	-0.02511	-0.0942***	0.0814***	0.1059***	0.08983***	0.0407*	-0.2036***	0.1954***	0.1304***
Lev	0.0675***	0.01748	0.01537	0.2333***	-0.01679	0.0006	0.0435**	-0.2551***	0.2437***	0.2460***
MTB	0.0819***	-0.01163	-0.0549***	-0.0368*	0.2697***	0.00872	0.0375*	-0.0795***	0.0600***	0.1237***
TobQ	0.0622***	-0.02559	-0.0574***	-0.1369***	0.2806***	0.02724	-0.0374*	0.0492**	-0.0405*	0.00271
CapEx	0.0821***	0.0402*	-0.0640***	-0.01304	-0.0456**	-0.00574	-0.0853***	-0.3037***	0.00467	0.0405*
CeoFinExp	0.01188	-0.00099	0.0374*	0.0370*	0.00804	-0.00912	-0.00554	-0.0404*	0.00932	0.03014
CeoAge	0.01891	-0.03388	0.01714	0.02789	-0.1053***	-0.00049	-0.0391*	-0.0530**	0.0593***	0.02516
CeoTen	-0.02176	-0.0304	0.00012	0.00236	0.02955	-0.0408*	-0.03223	0.0455**	-0.1450***	-0.01321
CeoEqt	0.1790***	0.02558	-0.0455**	0.3019***	0.4392***	-0.00755	0.0655***	0.02161	0.3299***	0.2443***

Table B.1. Correlation: Panel B

	BdAge	*Gen*	*Ten*	*YrRet*	*CeoDu*	*CeoNom*	*Busy*	*Interlock*	*BdFinExp*	*FmSz*
BdAge	1									
Gen	-0.1667***	1								
Ten	0.407***	-0.1141***	1							
YrRet	-0.02587	-0.04383	-0.03053	1						
CeoDu	-0.0466**	-0.0626***	0.01246	-0.00248	1					
CeoNom	-0.0984***	-0.0509**	-0.0387*	0.0409*	0.4570***	1				
Busy	0.1449***	0.0527**	-0.03213	0.01481	0.0473**	0.0694***	1			
Interlock	0.03244	-0.00884	0.00731	0.00997	-0.00321	-0.00307	0.00005	1		
BdFinExp	0.0377*	-0.00464	-0.02427	-0.1005***	-0.0429**	-0.0147	0.02682	-0.0113	1	
FmSz	0.00562	0.0886***	-0.02259	-0.1815***	0.0531**	0.02347	0.1832***	-0.01506	0.01206	1
ROA	0.0403*	-0.01495	0.0477**	0.0596***	0.02086	0.0342	0.0516**	-0.00729	-0.01248	-0.00366
ROA_{t+1}	0.0777***	-0.02843	0.0493**	0.0353*	0.02357	0.0446**	0.0418**	-0.0054	-0.02394	0.0342
ROE	0.0458**	0.01564	0.06674***	0.00233	0.03413	0.01117	0.0865***	-0.00592	-0.01638	0.1814***
ROE_{t+1}	0.0628***	-0.01094	0.0393*	-0.00519	0.01961	0.031	0.1037***	-0.00258	-0.00044	0.2236***
Lev	0.02969	0.0859***	-0.01727	-0.1326***	0.01543	-0.01846	0.1055***	0.00541	0.00426	0.4119***
MTB	0.0459**	0.01813	0.0471**	-0.01554	0.001	0.00513	0.1024***	-0.0226	0.01634	0.0750***
TobQ	0.0262	-0.01542	0.0498**	0.0470**	-0.00854	0.02283	0.0434**	-0.0216	-0.01635	-0.0935***
CapEx	-0.02066	0.03466	-0.01627	-0.02007	0.00156	0.02396	0.0078	-0.02531	-0.01895	0.1181***
CeoFinExp	0.00191	0.01356	-0.02401	-0.01226	-0.00963	-0.00922	0.0512**	-0.00136	0.00034	0.0437**
CeoAge	0.0910***	0.00218	0.0625***	0.01721	0.0471**	0.0502**	0.01457	0.0103	-0.0693***	-0.00059
CeoTen	0.0623***	-0.0426**	0.0923***	-0.0464**	0.01364	0.00251	-0.0579***	0.01943	0.0449**	-0.1229***
CeoEqt	-0.02058	0.0578***	-0.0224	-0.1606***	0.0438**	0.01974	0.1436***	-0.01641	0.0420**	0.6260***

Table B.1. Correlation: Panel C

	ROA	ROA_{t+1}	*ROE*	ROE_{T+1}	*Lev*	*MTB*	*TobQ*	*CapEx*	*CeoFinExp*	*CeoAge*	*CeoTen*	*CeoEqt*
ROA	1											
ROA_{t+1}	0.7255***	1										
ROE	0.7180***	0.5562***	1									
ROE_{t+1}	0.5682***	0.6944***	0.5742***	1								
Lev	-0.1253***	-0.0466**	0.1889***	0.2263***	1							
MTB	0.5788***	0.4972***	0.6113***	0.5845***	0.1785***	1						
TobQ	0.6441***	0.5115***	0.4756***	0.4365***	-0.2660***	0.8258***	1					
CapEx	-0.0404*	-0.1105***	0.02122	0.01191	0.1482***	-0.01431	-0.0618***	1				
CeoFinExp	0.0453**	0.03122	0.0428**	0.0630***	0.0883***	0.0600***	0.0483**	0.0258	1			
CeoAge	0.0605***	0.0628***	0.03421	0.02696	0.00515	-0.0733***	-0.0825***	0.0686***	0.00916	1		
CeoTen	0.1196***	0.0490**	0.0503**	0.0430**	-0.0973***	0.1276***	0.1676***	-0.01863	-0.01668	0.2222***	1	
CeoEqt	0.1241***	0.1200***	0.2313***	0.2264***	0.1296***	0.2696***	0.2238***	-0.0516**	0.0454**	-0.0457**	0.00096	1

*Note: *, **, *** depict significance levels at ten, five, and one percent significantly.*

APPENDIX C

Table C.1. Regression analysis: Panel A

Dependent variables	*Prediction sign*	*Model 1*		*Model 2*	
Intercept		–0.0728*	–0.0597	–0.0692**	–0.0558**
AudSz	–	**0.0090*****	**0.0094*****	**0.007*****	**0.0072*****
Acqs	+	–0.0035	–0.0040	–0.0068	**–0.0071***
DCompCash	?	0.00003		0.00001	
DCompEqt	–		**–0.0001*****		**–0.0001***
ROA_{t+1}		–0.0385	–0.0052	–0.0413	–0.0181
$DCompCash*ROA_{t+1}$	?	**–0.0013*****		**–0.0015*****	
$DCompEqt*ROA_{t+1}$	–		**–0.0009*****		**–0.0008*****
Stks	+	–0.0060	–0.0057	–0.0057	-0.0057
Dvz	+	0.0018	0.0023	0.0021	0.0028
HiDvz	+	–0.0065	**0.0095****	0.0018	0.0043
BdSz	–/+	–0.0002	–0.0009	**–0.0019****	**–0.0023****
BdInd	-	–0.0163	–0.0088	–0.0169	-0.0094
BdAge	–/+	0.0001	0.0002	0.0001	0.0001
Gen	–	**–0.0110****	**–0.0106****	**–0.0108****	**–0.0105****
Ten	–/+	–0.0002	–0.0003	–0.0003	–0.0004
YrRet	–/+	–0.0028	–0.0033	–0.0020	–0.0023
CeoDu	+	–0.0087	–0.0144	–0.0111	–0.0158
CeoNom	+	–0.0098	–0.0111	–0.0074	–0.0087
Busy	–/+	0.0016	0.0018	**0.0034****	**0.0036****
Interlock	+	–0.0520	–0.0579	–0.0430	–0.0446
BdFinExp	–	0.0010	0.0022	0.0008	0.0015
FmSz	+	**0.0172*****	**0.0181*****	**0.0150*****	**0.0142*****
Lev	+	**–0.0335***	**–0.0377****	–0.0160	–0.0200
MTB	+	**0.0048***	**0.0054****	**0.0039***	**0.0044***
TobQ	+	–0.0035	–0.0024	0.0023	0.0026
CapEx	+	**0.1509***	**0.1580****	**0.1419****	**0.1510****
CeoFinExp	-	–0.0281	–0.0344	–0.0406	**–0.0458***
CeoAge	–/+	–0.0001	–0.0002	0.0002	0.0001
CeoTen	–/+	–0.0005	–0.0004	–0.0003	–0.0003
CeoEqt	–	–0.000001	0.000001	–0.0000002	0.000001
IndFE		Yes	Yes	Yes	Yes
YrFE		Yes	Yes	Yes	Yes
N		2209	2209	2209	2209
R-square		0.0846	0.0998	0.0808	0.0923
Adjusted r-square		0.0651	0.0806	0.0613	0.073
F value		4.34	5.21	4.13	4.78
Pr > F		< 0.0001	< 0.0001	< 0.0001	< 0.0001

Table C.1. Regression analysis: Panel B

Dependent variables	*Prediction sign*	*Model 1*		*Model 2*	
Intercept		–0.0725*	0.2262***	–0.0673**	0.1580**
AudSz	–	**0.0091*****	**0.0093*****	**0.0071*****	**0.0071*****
LogAcqs	+	–0.0032	–0.00344	–0.0065	–0.0065
LogDCompCash	?	0.0001		–0.0017	
LogDCompEqt	–		**–0.1133*****		**–0.0849*****
ROA_{t+1}		–0.0148	–0.0004	–0.0119	–0.0093
$LogDCompCash*ROA_{t+1}$	?	**–0.0734*****		**–0.0852*****	
$LogDCompEqt*ROA_{t+1}$	–		**–0.0560*****		**–0.0561*****
Stks	+	–0.0060	–0.0050	–0.0057	–0.0050
Dvz	+	0.0022	0.0026	0.0025	0.0030
HiDvz	+	0.0065	**0.0081***	0.0019	0.0030
BdSz	–/+	–0.0001	–0.0006	**–0.0018***	**–0.0022****
BdInd	-	–0.0141	–0.0109	–0.0148	–0.0114
BdAge	–/+	0.0002	0.0002	0.0001	0.0001
Gen	–	**–0.0110****	**–0.0107****	**–0.0108****	**–0.0108****
Ten	–/+	–0.0002	–0.0003	–0.0003	–0.0003
YrRet	–/+	–0.0025	–0.0031	–0.0017	–0.0020
CeoDu	+	–0.0095	–0.0133	–0.0120	–0.0149
CeoNom	+	–0.0100	–0.0106	–0.0078	–0.0084
Busy	–/+	0.0016	0.0017	**0.0033****	**0.0035****
Interlock	+	–0.0506	–0.0555	–0.0409	–0.0427
BdFinExp	–	0.0012	0.0019	0.0010	0.0013
FmSz	+	**0.0166*****	**0.0185*****	**0.0140*****	**0.0147*****
Lev	+	**–0.0325***	**–0.0350***	–0.0148	–0.0175
MTB	+	**0.0047***	**0.0049***	0.0037	0.0040
TobQ	+	–0.0029	–0.0005	0.0029	0.0046
CapEx	+	**0.1556***	**0.1491***	**0.1494****	**0.1429****
CeoFinExp	–	–0.0302	–0.0368	**–0.0432***	**–0.0484***
CeoAge	–/+	–0.0001	–0.0002	0.0002	0.0001
CeoTen	–/+	–0.0005	–0.0005	–0.0004	–0.0003
CeoEqt	–	–0.000001	0.0000001	–0.0000003	0.0000003
IndFE		Yes	Yes	Yes	Yes
YrFE		Yes	Yes	Yes	Yes
N		2209	2209	2209	2209
R-square		0.0859	0.0943	0.084	0.0876
Adjusted r-square		0.0665	0.075	0.0645	0.0682
F value		4.42	4.89	4.31	4.51
Pr > F		< 0.0001	< 0.0001	< 0.0001	< 0.0001

Table C.1. Regression analysis: Panel C

Dependent variables	*Prediction sign*	*Model 1*		*Model 2*	
Intercept		–0.0745*	–0.06074	–0.0675**	–0.0610*
AudSz	–	**0.0089*****	**0.0091*****	**0.0068*****	**0.0070*****
LogAcqs	+	–0.00221	–0.00215	–0.0056	–0.0054
Cash_TComp	?	**0.0395*****		**0.0297*****	
Eqt_TComp	–		–0.0111		0.0012
ROA_{t+1}		**–0.0832****	0.0036	**–0.0823*****	–0.0064
*Cash_TComp*ROA*$_{t+1}$	?	–0.0629		–0.1174*	
*Eqt_TComp*ROA*$_{t+1}$	–		**–0.2432*****		**–0.2356*****
Stks	+	–0.0059	–0.0054	–0.0058	–0.0055
Dvz	+	0.0027	0.0030	0.0030	0.0033
HiDvz	+	0.0071	0.0075*	0.0020	0.0024
BdSz	–/+	–0.0004	–0.0004	–0.0019*	–0.0019*
BdIndExp	-	–0.0121	–0.0023	–0.0144	–0.0047
BdAge	–/+	0.0001	0.0001	0.0000	0.0001
Gen	–	**–0.0107****	**–0.0111****	**–0.0107****	**–0.0110****
Ten	–/+	–0.0002	–0.0003	–0.0003	–0.0003
YrRet	–/+	–0.0027	–0.0022	–0.0018	–0.0013
CeoDu	+	–0.0109	–0.0121	–0.0127	–0.0134
CeoNom	+	–0.0103	–0.0102	–0.0078	–0.0082
Busy	–/+	0.0018	0.0018	**0.0036****	**0.0035****
Interlock	+	–0.0452	–0.0438	–0.0355	–0.0345
BdFinExp	–	0.0007	0.0013	0.0004	0.0008
FmSz	+	**0.01600*****	**0.0147*****	**0.0130*****	**0.0116*****
Lev	+	**–0.0398****	–0.0320*	–0.0210	–0.0148
MTB	+	0.0052*	0.0046*	0.0042*	0.0037
TobQ	+	–0.0031	–0.0012	0.0024	0.0036
CapEx	+	**0.1610****	0.1525*	**0.1497****	**0.1451****
CeoFinExp	-	–0.0282	–0.0342	–0.0408	–0.0457*
CeoAge	–/+	–0.0002	–0.0003	0.0001	0.00004
CeoTen	–/+	–0.0006	–0.0004	-0.0004	–0.0003
CeoEqt	–	–0.000001	–0.0000002	–0.0000003	–0.00000004
IndFE		Yes	Yes	Yes	Yes
YrFE		Yes	Yes	Yes	Yes
N		2209	2209	2209	2209
R-square		0.0833	0.092	0.0746	0.0854
Adjusted r-square		0.0638	0.0726	0.0549	0.0659
F value		4.27	4.76	3.79	4.39
Pr > F		< 0.0001	< 0.0001	< 0.0001	< 0.0001

*Note: *, **, *** depict significance levels at ten, five, and one percent significantly.*