Are High-Quality Earnings Useful for Voting Shareholders? Evidence from the Top Executive Director Election in Japan[*]

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Abstract:

This study provides evidence of how earnings quality affects the relationship between a firm's earnings performance and the voting results on the top executive director (TED) election. When a firm reports low-quality earnings, it would be difficult for shareholders to conclude the manager's competence based on earnings performance. Accordingly, this paper hypothesizes that the approval rate for the TED election would be less sensitive to earnings performance when the firm reports low-quality earnings. Using a large sample of TED elections of Japanese listed firms, this paper finds that the approval rate of the TED election is positively associated with earnings performance, but low earnings quality weakens this relationship. These findings imply that low accounting quality makes earnings information less useful for voting shareholders to evaluate the management. Also, this paper finds that the moderating effect of earnings quality is more pronounced for firms with high institutional ownership.

Keywords: Shareholder Voting, Earnings Quality, Director Election, Corporate Governance.

1. Introduction

This study examines how earnings quality affects the relationship between a firm's earnings performance and the voting results on the top executive director (TED) election in the annual general meetings. Voting on director election is a fundamental approach for shareholders to discipline managers. Prior studies have shown that earnings measures are useful in evaluating management ability and adequacy (e.g. Bushman and Smith, 2001; Murphy and Zimmerman, 1993). However, literature also argues that the usefulness of accounting information depends on its "quality" (e.g. Dechow et al., 2010). When a firm reports low-quality earnings, shareholders may not be able to conclude based on earnings performance that the management is good or bad. Accordingly, I hypothesize the moderating effect of earnings quality on the usefulness of earnings for voting decisions.

Using a large sample of TED elections of Japanese listed firms, this paper finds that the approval rate of TED election is positively associated with earnings performance, but low-quality earnings weaken this relationship. These findings imply that shareholders discount the low-quality earnings information when they decide whether to vote for or against the management. Also, this paper finds that the sensitivity of approval rate to earnings performance and the moderating effect of earnings quality is more pronounced for firms with high institutional ownership, which implies that shareholders with information processing capabilities and

incentives especially consider earnings or their quality while voting.

Literature has argued the importance of earnings quality for shareholders and found that lower earnings quality leads to decreases in trading volume and increases in the cost of capital (Bhattacharya et al., 2003; Francis et al., 2004). This study contributes to these papers by showing that low earnings quality renders earnings less relevant for shareholders' voting decisions. The results of this study also add to the literature on the determinants of voting results (e.g. Cai et al., 2009) by showing that the relationship between earnings performance and approval rate of director election proposals is moderated by the firm's earnings quality.

The remainder of this paper is organized as follows. Section 2 reviews the related literature and presents our hypothesis. Section 3 describes our sample and research design. Section 4 presents the results of the empirical analysis, and section 5 concludes the paper.

2. Literature Review and Hypothesis

In the principal-agent relationship perspective, a corporate manager does not necessarily act to maximize shareholders' wealth, and this provides a rationale for shareholders' involvement in corporate control mechanisms. Accounting information functions as a direct input to the control mechanisms to penalize poor-performing managers (Bushman and Smith, 2001; Murphy and Zimmerman, 1993). Exercising voting rights is a common feature of shareholder governance to discipline the investee management.

This study is closely related to the literature on how shareholders consider firm performance when they decide whether to vote for or against director election proposals. Existing studies document that high earnings performance leads to favorable votes on director election (Asada and Yamamoto, 2019; Cai et al., 2009; Ng et al., 2009). These results are consistent with the argument that shareholders recognize earnings information as an input while they decide whether the management should be disciplined. In addition, Tsukioka(2020) reports that some types of institutional investors become more likely to vote against the management in the poor-performing firms after the introduction of Japan's Stewardship Code. The results in Tsukioka(2020) imply that low profitability leads to more dissenting votes to the management, while the strength of the association depends on the shareholders' incentive.

In the previous studies on the association between earnings performance and shareholder votes, the property of information used by voting shareholders is assumed to be homogeneous. However, extant literature argues that the usefulness of accounting information depends on its "quality." Although there are diversified perspectives about quality, earnings can be recognized as high-quality when they provide rich information about the firm's unobservable performance that is relevant to a specific decision made by users of financial information (Dechow et al., 2010). Particularly from the principal-agent perspective, high-quality accounting information provides

rich information for shareholders to distinguish between good and bad managers, hence decreases agency costs (Bushman and Smith, 2001). Biddle et al.(2009) argue that financial reporting that precisely conveys information about the firm's operation mitigates the information asymmetry between shareholders and managers. Conversely, when the earnings do not well explain the change in the operation, it becomes difficult for shareholders to conclude the managerial performance based on earnings information.

If users doubt the quality of earnings, they would make decisions that take into account the lack of information content of earnings. Consistent with the view, existing studies find that low-quality earnings proxies are positively associated with the cost of equity (Bhattacharya et al., 2003; Francis et al., 2004). Note that this argument assumes that at least some shareholders can perceive the earnings quality. Literature suggests that not all shareholders have the incentive to pay information processing costs (e.g. Blankespoor et al., 2019), so some are assumed to be indifferent to information quality. In addition, Engel et al.(2003) focus on the board's decision and provide evidence that the sensitivity of CEO turnover to earnings performance is higher than that to stock price performance when earnings are timely and less noisy. These results imply that users are less likely to rely on earnings information when the information does not have favorable attributes.

Voting shareholders decide whether to vote for or against the management based on available information. Given the above argument, shareholders would lower the reliance on low-quality earnings information for voting decision if they can perceive the quality. In this context, a strong association between earnings performance and approval rate means that the accounting information is useful for voting shareholders. This paper does not consider whether the management manipulates earnings quality to affect the voting outcome because its interest is how voting shareholders evaluate earnings quality as a given information attribute. In Japan, it is common that shareholder's discontent about managerial performance takes the form of dissenting votes to the election of TED[1]. In sum, shareholder votes for the TED election proposals would be less sensitive to earnings when the firm reports low-quality earnings. Therefore, this study introduces the hypothesis below:

Hypothesis: The approval rate of the TED election proposal is less sensitive to earnings performance when the firm reports low-quality earnings.

3. Research Design
3.1 Measurement

Given the discussion in the previous section, voting shareholders would prefer earnings that accurately reflect a change in the firm's operation (e.g. Biddle et al., 2009). Therefore, this study

chose earnings quality proxies which measure how precisely a firm's earnings depict the changes in the firm's operation or the competence of management. These proxies are calculated based on the firm's past earnings trend, assuming that shareholders infer whether they can rely on the reported earnings by analyzing the consistency of the firm's past information with the economic reality. The first proxy is the standard deviation of net income divided by total assets, estimated by firm for the most recent 10-year period including the current period ($\sigma(earnings)$). The underlying assumption of this measurement is that high volatility of earnings means that the earnings contain a lot of noise that is not attributable to the manager's ability (Engel et al., 2003; Francis et al., 2008).

The second is the absolute value of discretionary accruals estimated by the cross-sectional regression for each industry-year group of Kothari et al.'s(2005) model[2]. As with other proxies, this paper takes the average over the past 10 years for the absolute value of discretionary accruals by firm (Francis et al., 2008). This proxy is based on the argument that a manager can opportunistically manipulate earnings. From this perspective, earnings that contain a large number of abnormal accruals do not accurately represent the results of the company's operations. This study does not use the signed discretionary accruals because, regardless of the sign, the continuous and aggressive use of discretionary accruals is assumed to deteriorate the precision of earnings and reduce the reliability of the firm's financial information perceived by the shareholders.

The third proxy is accruals quality ($\sigma(WCA)$), defined as the standard deviation of residuals estimated by the firm-level regression of McNichols's(2002) model. This measurement assumes that earnings are informative about the change in the underlying economic reality of the firm when the firm's accruals process well explains the short-term fluctuation of operating cash flows. This proxy is extensively used in prior studies on earnings quality (Biddle et al., 2009; Francis et al., 2008). The estimation period of $\sigma(WCA)$ is most recent 10 years, but this paper conducts empirical tests using $\sigma(WCA)$ lagged by one year (as in Biddle et al., 2009) because the estimation of this proxy for period t requires data on operating cash flow for period t+1. Finally, the fourth measure is the common factor score ($LowAQ$), calculated by a factor analysis of the three proxies mentioned above.

3.2 Empirical Test

To test the hypothesis, the following regression model including year- and firm-fixed effects is estimated[3]:

$$For_{i,t} = \beta_0 + \beta_1 NI_{i,t} + \beta_2 LowEQ\_d_{i,t} + \beta_3 NI_{i,t} \times LowEQ\_d_{i,t} \qquad (1)$$

$$+ \sum \beta_k Controls_{i,t,k} + Firm_i + year_t + \varepsilon_{i,t}$$

where subscripts *i*, *t*, and *k* denote firm, year, and the number of control variables, respectively. In Japan, an annual general meeting of shareholders is held within three months of the end of the fiscal year, so $For_{i,t}$ means the approval rate at firm i's general meeting of shareholders held within three months of the end of the fiscal year t. *NI* is the firm's net income divided by lagged total assets. The predicted sign of *NI* is positive because a higher value of *NI* implies that the management is doing well. *LowEQ_d* is an indicator variable that takes 1 if the value of the earnings quality measure is in the upper quartile, which means especially low earnings quality and 0 otherwise[4]. The variable of interest is the cross term of earnings performance and dummy to measure low-quality earnings (*NI* x $LowEQ\_d_{i,t}$). According to my hypothesis, the coefficient of *NI* x *LowEQ_d* should be negative. This study adopts control variables following Tsukioka(2017) and Asada and Yamamoto(2019), which analyzed the determinants of the approval rate of management proposals of Japanese companies. These papers argue that firm's stock return, accounting-based performance, board characteristics (board size, percentage of outside director, directors' shareholding), ownership (financial institutions, foreign shareholders, business firms), and fundamentals[5] (firm size, leverage) are associated with the approval rate of management proposals. In addition, this study conducts an analysis that controls for meeting earnings targets such as positive earnings, earnings in the previous year, industry average, the latest management forecast because the literature suggests that these benchmarks are perceived as baseline values for judging whether the performance is good or bad[6] (Cai et al., 2009; Kaplan, 1994; Shuto, 2010). The definitions of the variables used are listed in Table 1.

<div align="center">[Insert Table 1 about here]</div>

3.3 Sample

The data collection process is as follows. First, I downloaded the HTML file of each firm's extraordinary report (*Rinji Hokoku Sho*) from the eol database and extracted the names of the candidates and the corresponding number of votes for and against each, and the number of abstained votes. Next, I downloaded the HTML file of each firm's annual securities report (*Yuka Shoken Hokoku Sho*) and collected the names of the directors who were approved in the AGM. After matching these two datasets, I excluded candidates proposed by shareholders and added candidates rejected via management proposals. In this study, TED is the representative director listed in the firm's securities report. The data of institutional ownership and board characteristics are collected from the NEEDS Cges database. Financial variables and ownership variables were taken from NEEDS Financial Quest 2.0.

The initial sample consists of 15,258 firm-year observations with non-missing voting results on TED election whose fiscal year ends between January 2011 to December 2017. Observations with at least one missing data point used in the calculation of σ(*earnings*) from 2001

to 2017 (estimation period of the variable) or the estimation of the model (1) are excluded. The final sample consists of 8,700 firm-year observations from 2011 to 2017. The calculation of |DAC| requires additional data, so the observations decreased to 8,100 firm-years. The calculation of abnormal working capital accruals and the estimation of σ(WCA) required additional non-missing data for the period 2001 to 2018 and hence the total number of observations decreased to 6,247 firm-years. Table 2 shows the summary statistics of all the variables used in this study. The mean approval rate of TED election proposals is 96.4%, suggesting that a majority of the shareholders of Japanese listed firms vote in favor of the management proposals for TED election[7].

[Insert Table 2 about here]

Table 3 presents the correlation matrix. The raw value of the proxies of earnings quality (σ(*earnings*), |*DAC*|, σ(*WCA*)) exhibit relatively high (from 0.30 to 0.41) correlation, suggesting that each proxy partly shares common aspects of earnings quality. The correlation between four measures of earnings quality and earnings itself (*NI*) is modest (from -0.01 to -0.03).

[Insert Table 3 about here]

4. Results

Table 4 presents the results of the empirical analyses. This study hypothesizes that low-quality earnings decrease the sensitivity of voting decisions to earnings performance. The premise of the discussion is that earnings performance is positively associated with the approval rate. Column (1) reports the coefficient of *NI* which is significantly positive, which suggests that voting shareholders generally recognize earnings performance as an input to evaluate the TED's competence. These results are consistent with the arguments in prior studies (e.g. Bushman and Smith, 2001; Cai et al., 2009). Also, one may argue that low-quality earnings lead to more dissenting votes if shareholders dislike information risk that may exacerbate agency problems. However, the coefficients on the single term *LowEQ_d* are insignificant among all columns in Table 4.

The results for the control variables are as follows: the coefficient of *ID_ratio* is significantly positive, suggesting that the board independence and directors' ownership mitigates shareholders' concern about the TED election. In addition, the approval rate is positively related to ownership by business firms and negatively associated with foreign ownership, which implies that firm shareholders are likely to vote in favor of the management and foreign shareholders are more willing to vote against TED elections. Also, the approval rate of TED election tends to be positively related to firm size[8] and negatively related to leverage.

Columns (2) – (5) in Table 4 present the estimation results of Model (1). Even after including the cross-term *NI* x *LowEQ_d*, the coefficient of *NI* remains significant. The cross-terms of *NI* and *LowEQ_d* using four alternative measures (σ(*earnings*), |*DAC*|, σ(*WCA*), *LowAQ*) are

all negatively associated with the approval rate. These results suggest that low earnings quality consistently decreases the sensitivity of approval rate to earnings performance, regardless of adopted proxies. These results are robust to the estimation that includes dummy variables measuring the achievement of the earnings target (column (6) in Table 4).

It is worth checking the economic significance of the results. Since the coefficients of *NI* range from 0.140 to 0.288, the effect of a change of one standard deviation in *NI* (0.041) on the approval rate is from 0.6% to 1.2%. The effects of *LowEQ_d* using four alternative measures (σ(*earnings*), |*DAC*|, σ(*WCA*), *LowAQ*) on the coefficients of *NI* are -0.102, -0.112, -0.107, and -0.203, respectively. In sum, while the magnitude of the effect of earnings performance on voting results is modest on average, the indicator of low-quality earnings has a non-trivial effect on the sensitivity of approval rate to earnings performance.

Overall, the results in Table 4 support the hypothesis that shareholders discount the low-quality earnings information while voting on the TED election. These findings are consistent with Bushman and Smith's(2001) argument that high-quality earnings make it easy for outsiders to identify good and bad managers, and Bhattacharya et al.'s(2003) argument that shareholders are assumed to perceive earnings quality but cannot see through it, hence discount the low-quality earnings information.

[Insert Table 4 about here]

Yet, this paper assumes that only shareholders with capabilities to process information can perceive the earnings quality. If so, the discounting behavior of low-quality earnings observed in Table 4 would be more pronounced for firms with high ownership by shareholders who have strong incentives to gather information. Therefore, I split the sample by ownership by institutional investors, who are generally active monitors of the investee companies (e.g. Aggarwal et al., 2011), and re-estimate model (1) to confirm the validity of the assumption. Table 5 shows the results of the estimation using the sample that institutional ownership is in the lower quartile (< 0.02) (column (1)) and that in the upper quartile (>0.21) (column (2)). Results suggest that the moderating effect of earnings quality on the sensitivity of approval rate to earnings is more pronounced in the sample with high institutional ownership. When using the sample with low institutional ownership, the variable of interest (*NI* x *LowEQ_d*) and even the earnings performance itself are not significant. Testing for differences in coefficients by the Wald test, we found that the differences are significant at the 1% level (χ^2=29.71) for *NI* and the 5% level (χ^2=5.45) for *NI* x *LowEQ_d*. These results are consistent with the view that the discount of low-quality earnings observed in Table 4 is mainly driven by shareholders with capability of information processing.

[Insert Table 5 about here]

5. Conclusion

The objective of this study is to test how earnings quality affects the relationship between a firm's earnings performance and shareholder votes on TED election. The results of this study suggest that low earnings quality decreases the sensitivity of the approval rate to earnings performance. Also, this paper finds that the association of approval rate to earnings performance and the effect of earnings quality are more pronounced for firms with high institutional ownership, which is consistent with the argument that shareholders with monitoring capabilities or incentives especially care about earnings quality. Overall, the results imply that low earnings quality makes earnings information less useful for voting shareholders to evaluate the TED. Yet, it is worth noting that this paper does not consider whether the management utilizes the moderating effect of earnings quality to affect the voting results, or whether they should do so.

Footnotes

1. The ISS Voting Guidelines 2015 argues that it is reasonable for shareholders to evaluate top management because the main function of the board of directors in Japanese firms, in reality, is executing the business rather than supervising the top management.

2. Note that Francis et al.(2008) use the modified Jones model to estimate discretionary accruals. This paper adopts the model developed by Kothari et al.(2005) to control the effect of the firm's profitability.

3. Model (1) includes firm-fixed effects to control the firm-specific attributes potentially correlated with earnings quality proxies. Yet, several existing studies on the determinants and consequences of earnings quality estimate the model without firm-fixed effects because the measures of earnings quality tend to be time-invariant. It is important to note that when firm-fixed effects are replaced with industry-fixed effects, the results in Table 3 remain similar.

4. If I use continuous variables of earnings quality measures instead of *LowEQ_d*, the results are similar.

5. Asada and Yamamoto(2019) use net cash ratio (cash minus total debt divided by total asset) as explanatory variables. This paper does not use this proxy because the correlation of net cash ratio and *Lev* is more than 0.9, suggesting that the two variables have an almost perfect negative correlation.

6. This paper does not include these "meeting target" dummies in the main analyses because these dummies and *NI* are strongly correlated (see Table 3). Also, when I estimate the model (1) using industry-adjusted ROA as an explanatory variable following Cai et al.(2009) instead of *NI*, the insight from the estimation results remains similar.

7. The range of values of approval rate (*For*) is limited from 0 to 1, with some firms receiving no dissenting votes, and thus estimation of non-linear models may be recommended. Nevertheless, the results are robust to the estimation of the Tobit model using *Against* (dissenting votes / total votes exercised) as the dependent variable.

8. Table 3 shows that *LnTA* is strongly correlated with other variables such as *Foreign%*, which raises concern about multicollinearity. Note that the main results are robust to the estimation that excludes *LnTA* from the estimation.

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Table 1: The definitions of variables

Variables	Definition
For	The number of votes in favor of the management proposal of the TED election in the annual general meeting held within three months of the end of the fiscal year t divided by the total number of votes cast on that election.
NI	Net income divided by lagged total asset. To make the timeline consistent, the value of net income is based on the summary of financial results ("*Kessan Tanshin*") released before the general meeting of shareholders corresponding to period t.
σ(*earnings*)	The standard deviation of the firm's *NI*, calculated for the most recent 10-year period (from t-9 to t) for each firm-year. The value of net income in the current period is based on the summary of financial results ("*Kessan Tanshin*") released before the general meeting of shareholders corresponding to period t.
|DAC|	The most recent 10-year average (from t-9 to t) of the absolute value of discretionary accruals ($\omega_{i,\tau}$), calculated based on Kothari et al.(2005), which includes ROA as an independent variable in the regression model. I estimate the following cross-sectional regression for each industry-year group with at least 10 observations: $$\frac{TA_{i,\tau}}{Assets_{i,\tau-1}} = \gamma_0 + \gamma_1 \frac{1}{Assets_{i,\tau-1}} + \gamma_2 \frac{\Delta Rev_{i,\tau} - \Delta Rec_{i,\tau}}{Assets_{i,\tau-1}} + \gamma_3 \frac{PPE_{i,\tau}}{Assets_{i,\tau-1}} + \gamma_4 \frac{NetInc_{i,\tau}}{Assets_{i,\tau-1}} + \omega_{i,\tau}$$ where *i* and τ denote firm and fiscal year, respectively. *TA* is total accruals calculated as net income before extraordinary gains and losses minus cash flow from operation. *ΔRev* is a change in revenue. *ΔRec* is a change in trade receivables. *PPE* is the gross value of fixed assets subject to depreciation and amortization. *NetInc* is the firm's net income. *Assets* is the book value of total assets. The value of financial data in the current period is based on the summary of financial results ("*Kessan Tanshin*") released before the general meeting of shareholders corresponding to period t.
σ(*WCA*)	The standard deviation of the residuals ($v_{i,\tau}$) in the McNichols's(2002) regression model estimated for the most recent 10-year period (τ = t-9 to t) for each firm-year: $$\frac{TCA_{i,\tau}}{Assets_{i,\tau}} = \varphi_0 + \varphi_1 \frac{CFO_{i,\tau-1}}{Assets_{i,\tau}} + \varphi_2 \frac{CFO_{i,\tau}}{Assets_{i,\tau}} + \varphi_3 \frac{CFO_{i,\tau+1}}{Assets_{i,\tau}} + \varphi_4 \frac{\Delta Rev_{i,\tau}}{Assets_{i,\tau}} + \varphi_5 \frac{PPE_{i,\tau}}{Assets_{i,\tau}} + v_{i,\tau}$$ where *i* and τ denote firm and fiscal year, respectively. *TCA* is total current working capital accruals defined as a change in current assets minus a change in current liabilities minus a change in cash plus a change in short-term debt. *CFO* is cash flow from operations. *ΔRev* is a change in revenue. *PPE* is the gross value of fixed assets subject to depreciation and amortization. *Assets* is the book value of total assets. This paper conducts the main analyses using σ(*WCA*) lagged by one year as an explanatory variable. The value of operating cash flow in the current period is based on the summary of financial results ("*Kessan Tanshin*") released before the general meeting of shareholders corresponding to period t.
LowAQ	A factor score, calculated by the factor analysis of σ(*earnings*), *|DAC|* and σ(*WCA*).
Return	The 15 months stock return ending three months after the end of fiscal year t.
ID_ratio	The number of outside directors divided by the total number of directors.
No. D	The total number of directors.
Director%	The number of shares held by directors divided by the total number of outstanding shares.
Fin%	The number of shares held by financial institutions divided by the total number of outstanding shares.
Foreign%	The number of shares held by foreign shareholders divided by the total number of outstanding shares.
Firm%	The number of shares held by firms divided by the total number of outstanding shares.
LnTA	The natural logarithm of the book value of total assets, based on the summary of financial results ("*Kessan Tanshin*") released before the general meeting of shareholders corresponding to period t.
Lev	The book value of total debt divided by the book value of total assets, based on the summary of financial results ("*Kessan Tanshin*") released before the general meeting of shareholders corresponding to period t.
MB_0	The indicator variable that takes 1 if the firm's profit is positive and 0 otherwise.

MB_increase	The indicator variable that takes 1 if the firm's profit is higher than that in the previous year and 0 otherwise.
MB_industry	The indicator variable that takes 1 if the firm's profit is higher than the industry average and 0 otherwise.
MB_mf	The indicator variable that takes 1 if the firm's profit is higher than the latest management forecast and 0 otherwise.

Table 2: Summary statistics

stats	N	mean	sd	min	p25	p50	p75	max
For	8,700	0.964	0.048	0.763	0.953	0.983	0.995	1.000
NI	8,700	0.031	0.041	-0.304	0.014	0.030	0.050	0.259
σ(*earnings*)	8,700	0.028	0.025	0.003	0.013	0.022	0.035	0.230
|DAC|	8,100	0.029	0.016	0.008	0.018	0.025	0.035	0.103
σ(*WCA*)	6,247	0.016	0.011	0.003	0.008	0.013	0.020	0.067
LowAQ	5,876	0.000	1.000	-1.559	-0.678	-0.230	0.401	5.850
Return	8,700	1.139	0.369	0.295	0.932	1.072	1.260	3.989
ID_ratio	8,700	0.175	0.147	0.000	0.000	0.167	0.250	0.857
No. D	8,700	8.576	3.059	3.000	6.000	8.000	10.000	30.000
Director%	8,700	0.037	0.068	0.000	0.002	0.008	0.036	0.700
Fin%	8,700	0.206	0.121	0.000	0.110	0.191	0.297	0.489
Foreign%	8,700	0.115	0.123	0.000	0.014	0.071	0.189	0.510
Firm%	8,700	0.274	0.174	0.004	0.133	0.249	0.384	0.770
LnTA	8,700	11.066	1.554	8.071	9.960	10.866	11.988	15.455
Lev	8,700	0.475	0.189	0.076	0.328	0.474	0.617	0.930
MB_0	8,700	0.906	0.292	0.000	1.000	1.000	1.000	1.000
MB_increase	8,700	0.683	0.465	0.000	0.000	1.000	1.000	1.000
MB_industry	8,700	0.491	0.500	0.000	0.000	0.000	1.000	1.000
MB_mf	8,700	0.606	0.489	0.000	0.000	1.000	1.000	1.000

All continuous variables were winsorized at the point of 1 percentile and 99 percentile.

Table 3: Correlation Matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
(1)	For	1.00																		
(2)	NI	0.10	1.00																	
(3)	σ(earnings)	-0.02	-0.01	1.00																
(4)	|DAC|	0.05	-0.01	0.30	1.00															
(5)	σ(WCA)	-0.03	-0.03	0.41	0.36	1.00														
(6)	LowAQ	0.00	-0.02	0.75	0.72	0.79	1.00													
(7)	Return	0.05	0.27	0.07	0.03	0.02	0.06	1.00												
(8)	ID_ratio	0.06	0.06	0.06	0.00	0.01	0.03	0.02	1.00											
(9)	No. D	-0.10	0.09	-0.25	-0.20	-0.13	-0.26	-0.03	0.00	1.00										
(10)	Director%	0.13	0.02	0.06	0.10	0.02	0.08	0.04	-0.10	-0.15	1.00									
(11)	Fin%	-0.23	0.11	-0.22	-0.27	-0.14	-0.27	-0.03	0.04	0.35	-0.36	1.00								
(12)	Foreign%	-0.34	0.24	-0.05	-0.11	0.00	-0.07	0.04	0.19	0.32	-0.19	0.49	1.00							
(13)	Firm%	0.21	-0.04	-0.01	0.11	0.03	0.06	0.00	-0.02	-0.09	-0.10	-0.49	-0.42	1.00						
(14)	LnTA	-0.29	0.10	-0.23	-0.27	-0.12	-0.27	-0.02	0.10	0.53	-0.31	0.65	0.70	-0.27	1.00					
(15)	Lev	0.08	-0.33	0.06	0.07	-0.02	0.05	0.00	-0.08	0.00	-0.03	-0.05	-0.18	0.04	0.07	1.00				
(16)	MB_0	0.10	0.61	-0.19	-0.06	-0.08	-0.15	0.13	-0.01	0.13	-0.04	0.14	0.11	0.00	0.12	-0.16	1.00			
(17)	MB_increase	0.08	0.29	-0.07	-0.02	0.00	-0.04	0.21	-0.07	0.03	0.02	0.05	0.01	-0.01	0.02	0.00	0.24	1.00		
(18)	MB_industry	0.10	0.60	0.03	0.00	0.01	0.02	0.16	0.00	0.07	0.04	0.08	0.22	-0.04	0.08	-0.28	0.29	0.23	1.00	
(19)	MB_mf	-0.03	0.21	-0.05	-0.03	-0.03	-0.05	0.09	0.04	0.10	-0.10	0.14	0.13	-0.04	0.19	-0.07	0.17	0.17	0.17	1.00

This table present the Pearson's listwise correlation matrix.

Table 4: The effect of earnings and their attributes on voting results

	(1)	(2)	(3)	(4)	(5)	(6)
		Earnings quality measure				
		σ(*earnings*)	|*DAC*|	σ(*WCA*)	*LowAQ*	*LowAQ*
Variables	*For*	*For*	*For*	*For*	*For*	*For*
NI	0.140***	0.224***	0.184***	0.202***	0.288***	0.192***
	(0.022)	(0.033)	(0.027)	(0.034)	(0.038)	(0.047)
LowEQ_d		0.004	0.005	0.003	0.003	0.003
		(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
NI* x *LowEQ_d		**-0.102***	**-0.112***	**-0.107***	**-0.203***	**-0.170***
		(0.036)	**(0.037)**	**(0.039)**	**(0.042)**	**(0.043)**
Return	0.002	0.001	0.002	0.002*	0.002	0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
ID_ratio	0.081***	0.081***	0.082***	0.084***	0.086***	0.086***
	(0.008)	(0.008)	(0.009)	(0.010)	(0.010)	(0.010)
No. D	0.000	0.000	0.000	0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Director%	0.027	0.026	0.014	0.043*	0.039	0.035
	(0.020)	(0.020)	(0.021)	(0.025)	(0.025)	(0.024)
Fin%	-0.004	-0.007	-0.014	-0.012	-0.015	-0.017
	(0.022)	(0.022)	(0.023)	(0.024)	(0.025)	(0.025)
Foreign%	-0.070***	-0.072***	-0.087***	-0.058**	-0.071***	-0.070***
	(0.021)	(0.021)	(0.023)	(0.023)	(0.026)	(0.026)
Firm%	0.037***	0.037***	0.032**	0.033*	0.032*	0.030
	(0.014)	(0.014)	(0.015)	(0.018)	(0.018)	(0.018)
LnTA	0.016***	0.017***	0.019***	0.010*	0.011*	0.012**
	(0.005)	(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
Lev	-0.020	-0.021	-0.032**	-0.019	-0.026*	-0.025*
	(0.014)	(0.014)	(0.015)	(0.014)	(0.015)	(0.015)
MB_0						0.010***
						(0.003)
MB_increase						-0.002
						(0.001)
MB_industry						0.004**
						(0.002)
MB_mf						0.001
						(0.001)
Constant	0.786***	0.781***	0.771***	0.853***	0.847***	0.825***
	(0.057)	(0.057)	(0.062)	(0.062)	(0.066)	(0.067)
Firm	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes
Observations	8,700	8,700	8,100	6,247	5,876	5,876
AdRs	0.071	0.073	0.077	0.071	0.082	0.087

***, **, * denote significance at 1%, 5%, 10% level, respectively. Standard errors clustered by firm level are shown in parentheses.

Table 5: Heterogeneity of the moderating effect

	(1)	(2)
Earnings quality measure	*LowAQ*	*LowAQ*
Institutional ownership	< p25 (0.02)	> p75 (0.21)
Variables	*For*	*For*
NI	0.041	0.545***
	(0.029)	(0.106)
LowEQ_d	0.004	-0.001
	(0.003)	(0.009)
NI x LowEQ_d	**-0.022**	**-0.302****
	(0.029)	**(0.130)**
Constant	1.076***	0.546**
	(0.067)	(0.252)
Firm	Yes	Yes
Year	Yes	Yes
Controls	Yes	Yes
Observations	1,470	1,468
AdRs	0.025	0.165

***, **, * denote significance at 1%, 5%, 10% level, respectively. Standard errors clustered by firm level are shown in parentheses.