"CEO educational backgrounds and non-GAAP earnings disclosures"

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CEO EDUCATIONAL BACKGROUNDS AND NON-GAAP EARNINGS DISCLOSURES

Abstract

Non-GAAP earnings have received attention recently. Existing literature suggests CEOs' educational backgrounds affect the financial reporting quality. Thus, the paper analyzes whether the educational background of CEOs affects the disclosure of non-GAAP earnings. Using logit regression to examine the probability of non-GAAP earnings disclosures, this study finds the coefficient value of MBA is 0.4171, which suggests that CEOs with an MBA degree are more likely to disclose non-GAAP earnings than other CEOs. In addition, the moderating effect of audit committee quality on the association between CEO educational backgrounds and non-GAAP earnings disclosures is investigated. The coefficient value of MBA×ACC_QUA is −2.809, which suggests that audit committee quality negatively moderates a positive association between MBA-holding CEOs and non-GAAP earnings disclosures. By focusing on a company's non-GAAP earnings, this study contributes to the financial reporting literature. The results provide evidence that CEO education backgrounds and audit committee quality influence firms' non-GAAP earnings disclosures.

Keywords	CEO, education background, MBA degree, non-GAAP earnings disclosures, audit committee quality
JEL Classification	M12, M41, G34

INTRODUCTION

Non-GAAP earnings, also known as "pro forma" or "street earnings" in the earnings news, have garnered attention (Choi et al., 2007; Black & Christensen, 2009; Guillamon-Saorin et al., 2017). Non-GAAP earnings are performance indicators disclosed voluntarily by managers. When calculating these alternative performance measures, managers exclude certain one-time or unusual charges from GAAP net income. The Securities and Exchange Commission indicates that non-GAAP reporting increases the risk of fraud. Literature investigates managers' strategies for disclosing non-GAAP earnings and the significance of non-GAAP earnings data. However, few studies examine the managerial characteristics that lead to non-GAAP earnings disclosure. Consequently, this study investigates how the educational background of CEOs influences non-GAAP earnings disclosures.

1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Research indicates that non-GAAP measures convey more relevant information than GAAP earnings (Bradshaw & Sloan, 2002; Bhattacharya et al., 2003; Brown & Sivakumar, 2003; Brown & Sivakumar, 2004; Lougee & Marquardt, 2004) and influence the decisions of less-sophisticated investors (Frederickson & Miller, 2004; Allee et al., 2007). Doyle et al. (2013) find that when balance sheet limitations are strong, managers exclude more expenses from non-

GAAP earnings calculations. Christensen (2009) indicates managers exclude not only one-time expenses such as restructuring charges, but also recurring expenses such as depreciation, amortization, research and development, and stock-based compensation to achieve these strategic goals. Bhattacharya et al. (2003) find that some managers report adjusted earnings measures that more accurately reflect long-term core earnings, while others may report adjusted earnings measures that overstate operating results.

The financial executives regard non-GAAP earnings as one of the most important performance metrics disclosed to investors (Graham et al., 2005). Firms may use non-GAAP figures to manage their impression (Black & Christensen, 2009; Bowen et al., 2005; Doyle et al., 2003). Lougee and Marquardt (2004) indicate that the disclosure of non-GAAP earnings measures may be influenced by incentives to meet or beat analyst expectations. Bhattacharya et al. (2007) find that share-based compensation creates an incentive for managers to report opportunistic non-GAAP measures to the extent that non-GAAP information influences share prices. Black et al. (2017) indicate that when companies cannot use real or accrual earnings management, they are more likely to report non-GAAP earnings. However, there is limited research on the managerial characteristics behind the disclosure of non-GAAP earnings.

Bamber et al. (2010) indicate managers' disclosure styles are related to their demographic backgrounds. According to Finkelstein et al. (2009), the educational background of managers may affect firm decisions. Bertrand and Schoar (2003) indicate that managers with MBA degrees may adopt more aggressive strategies such as spending more capital investments, taking on more debt, undertaking more diversification acquisitions, and paying out fewer dividends. Graham and Harvey (2001) find that CFOs with an MBA use more sophisticated valuation methodologies than those without an MBA. Bamber et al. (2010) indicate that managers' disclosure styles are also influenced by their personal background (e.g., managers' work experience, military experience, and whether they were born before World War II). They find that managers with experience in finance, accounting, and the military provide more precise disclosures. Managers

are likely to rely on their own knowledge when disclosing accounting information (Delmas & Toffel, 2008). Lewis et al. (2014) indicate that the education of CEOs influences the disclosure of environmental information. In the context of this literature, this study argues that CEOs with MBAs are more likely to voluntarily disclose their firm's non-GAAP earnings than other CEOs.

In response to concerns about non-GAAP reporting abuse, the SEC issued Regulation G, which requires a firm that discloses significant non-GAAP earnings to provide the reconciliation to relevant GAAP results (SEC, 2003). Prior research has demonstrated that in the presence of transitory advantages following the implementation of Regulation G, some managers may report non-GAAP earnings opportunistically (Baumker et al., 2014; Curtis et al., 2014). Black et al. (2017) indicate that regulation has generally led to less aggressive non-GAAP reporting, but some companies still release non-GAAP earnings numbers that could be misleading even after SOX regulation. Prior study has found a drop in the incidence and magnitude of non-GAAP exclusions after the implementation of regulation (Marques, 2006; Entwistle et al., 2006). Heflin and Hsu (2008) find evidence that SOX and Regulation G decreased the frequency and scope of both special and recurring exclusions. Isidro and Marques (2013) indicate, from the perspective of corporate governance, that when board director compensation is tied to firm performance, companies may disclose non-GAAP figures, and make supplementary adjustments for recurring items to avoid reconciliations. This reporting style has been associated with opportunistic disclosures. According to Isidro and Marques (2015), countries with strong investor protection, competent law enforcement, developed financial markets, increased communication and information distribution are more likely to use non-GAAP results to meet or beat strategic performance goals.

Literature suggests that stakeholders benefit from corporate governance rules that limit opportunistic managerial activity (Ashbaugh-Skaife et al., 2006), and independent directors can limit opportunism related to non-GAAP earnings exclusions (Frankel et al., 2011). One of the responsibilities of the audit committee is to monitor a company's GAAP and non-GAAP earnings (Warner, 2006). Non-GAAP earnings are not audited and can therefore be ma-

nipulated by managers (Bruce & Bradshaw, 2004; Frankel et al., 2011). Given that the audit committee is an internal control mechanism for monitoring firms' financial reporting, this study examines the moderating effect of audit committee quality on the relationship between CEO educational background and non-GAAP earnings disclosures. Audit committees with financial expertise reduce the incidence of internal control problems (Krishnan, 2005) and non-GAAP earnings exclusions (Seetharaman et al., 2014). This study therefore hypothesizes that the quality of the audit committee decreases the positive relationship between the CEO's educational background and non-GAAP earnings disclosures. Consequently, this study develops the following hypotheses:

H1: Firms led by CEOs with MBAs are more likely to disclose non-GAAP earnings than are other firms.

H2: The positive relationship between CEOs with MBA degrees and non-GAAP earnings disclosures is weaker for firms with high quality audit committees.

2. METHOD

Hypothesis 1 states that CEOs with MBA degrees relate to firms' non-GAAP earnings disclosures. The probability of non-GAAP earnings disclosures is examined using logit regression. Following the literature, this study modifies Isidro and Marques' (2013) equation to form the basic model as follows:

$$
\begin{aligned}
\text{NONGAAP} = {} & \alpha_0 + \alpha_1 \text{MBA} + \alpha_2 \text{ACC\_QUA} \\
& + \alpha_3 \text{NEW\_CEO} + \alpha_4 \text{INSI\_OWN} \\
& + \alpha_5 \text{INSIDER\_OWN} + \alpha_6 \text{CON\_BEAT} \\
& + \alpha_7 \text{ANALY\_FOLL} + \alpha_8 \text{INTAN} + \alpha_9 \text{SPECIAL} \\
& + \alpha_{10} \text{RISK} + \alpha_{11} \text{SIZE} + \alpha_{12} \text{LEV} \\
& + \sum \text{IND\_DUM} + \sum \text{YEAR\_DUM} + \varepsilon.
\end{aligned} \tag{1}
$$

Hypothesis 2 states that audit committee quality moderates the relationship between CEO educational background and non-GAAP earnings disclosures. Thus, equation (1) was modified to form the research model as follows:

$$
\begin{aligned}
\text{NONGAAP} = {} & \gamma_0 + \gamma_1 \text{MBA} + \gamma_2 \text{ACC\_QUA} \\
& + \gamma_3 \text{MBA} \times \text{ACC\_QUA} + \gamma_4 \text{NEW\_CEO} \\
& + \gamma_5 \text{INST\_OWN} + \gamma_6 \text{INSIDER\_OWN} \\
& + \gamma_7 \text{CON\_BEAT} + \gamma_8 \text{ANALY\_FOLL} \\
& + \gamma_9 \text{INTAN} + \gamma_{10} \text{SPECIAL} + \gamma_{11} \text{RISK} \\
& + \gamma_{12} \text{SIZE} + \gamma_{13} \text{LEV} \\
& + \sum \text{IND\_DUM} + \sum \text{YEAR\_DUM} + \varepsilon.
\end{aligned} \tag{2}
$$

NONGAAP is an indicator variable coded as 1 if the firm discloses the non-GAAP earnings, and 0 otherwise (Bansal et al., 2013; Brown et al., 2012). MBA is an indicator variable that is coded as 1 if the company's CEO has an MBA, and 0 otherwise. ACC_QUA is the average score for the audit committee quality (Krishnan, 2005; Seetharaman et al., 2014) in that it considers three proxies: the number of committee members (ACSIZE), the proportion of independent committee members (ACC_IND), and the presence of a financial expert on the audit committee (ACC_FIN). The three variables were transformed into percentile scores, and an index, ACC_QUA, was developed to represent their combined effect. ACC_QUA is the average of these three percentile values.

The control variables are: Newly appointed executives (NEW_CEO) is defined as if the CEO has been in office for fewer than three years, the value is 1, otherwise it is 0. NEW_CEO is expected to relate positively to non-GAAP earnings disclosures because short-tenured CEOs perceive less risk in disclosing information (Lewis et al., 2014). This study considers the proportion of institutional ownership (INST_OWN) and insider ownership (INSDER_OWN) because strong shareholders reduce voluntary public disclosures. INST_OWN and INSDER_OWN are expected to be negatively associated with non-GAAP disclosures (Eng & Mak, 2003; Schadewitz & Blevins, 1998). Consensus beating (CON_BEAT) is a dummy variable coded as 1 when non-GAAP earnings meet or beat analysts' forecasts, and 0 otherwise. Analyst following (ANALY_FOLL) is the log of the number of analysts who follow the company as a proxy for analyst influence on non-GAAP reporting. CON_BEAT and ANALY_FOLL are expected to be positively related to non-GAAP disclosures (Isidro & Marques, 2013). Intangible assets

(INTAN), calculated as the value of intangibles scaled by total assets, is anticipated to have a positive coefficient due to firms' inclination to revert the amortization of goodwill to its original value (Marques, 2006). Special item (SPECIAL) is an indication variable that is coded as 1 if the company reports special or extraordinary items or discontinues operations, and 0 otherwise. The literature indicates that firms with more special items disclose non-GAAP earnings more often (Isidro and Marques, 2013; Marques, 2006). Firm risk (RISK) is the quarterly return on assets standard deviation over the sample period and is expected to be positively related to non-GAAP disclosures (Lougee & Marquardt, 2004). Firm size (SIZE) is the natural log of total assets and is associated with non-GAAP disclosures (Marques, 2006; Isidro & Marques, 2013). Total liabilities divided by total equity is the definition of firm leverage (LEV), and a positive coefficient is expected (Marques, 2006; Isidro & Marques, 2013). In the pooled model, this study adjusts for industry and year fixed effects by including industry and year dummies.

In Hypothesis 1, the variable of interest is MBA, which reflects firms managed by CEOs with MBA degrees. If the coefficient of α_1 is positive, Hypothesis 1 is supported. In Hypothesis 2, the variable of interest is the interaction term MBA × ACC_QUA, which captures the differential impact of firms with a higher-quality audit committee. If the coefficient of γ_3 is negative, Hypothesis 2 is supported.

This study examines US firms from 2007 to 2017. Financial and utility firms were excluded from the analysis. The data used in this study were obtained from several sources. First, data on non-GAAP exclusion were obtained from Professor Kurt H. Gee's website (https://sites.google.com/view/kurthgee/data). Second, this study collected financial and returns data from Compustat. Finally, other variables were hand-collected.

3. RESULTS AND DISCUSSION

Table 1 reveals that 61% of firms report non-GAAP earnings (NONGAAP), 18.9% of CEOs have MBA degrees (MBA), 21.9% of CEOs have been in office for less than three years (NEW_CEO), institutional investors (INST_OWN) hold 86.3% of shares, and insiders (INSIDER_OWN) hold 5.8%. Table 1 also describes auditor committee characteristics. On average, approximately 3.716 directors serve on a committee (ACSIZE); 99.4% of the firms have independent directors on their audit committee (ACC_IND). Of the firms, 89% of audit committees have financial experts (ACC_FIN); 35.4% firms report the non-GAAP earnings to meet the analyst earnings (CON_BEAT). The mean number of analysts following (ANALY_FOLL) is 15.818%. The mean intangible assets to total assets (INTAN) is 22.1%. Of the firms, 81.1% report special items (SPECIAL). The mean volatility of monthly stock returns (RISK) is 0.103; the mean

Table 1. Descriptive statistics

Variables	N	Mean	Min	Q1	Q2	Q3	Max
NONGAAP	2,429	0.610	0.000	0.000	1.000	1.000	1.000
MBA	2,429	0.189	0.000	0.000	0.000	0.000	1.000
ACC_QUA	2,429	0.837	0.334	0.809	0.809	0.927	1.000
ACSIZE	2,429	3.716	1.000	3.000	4.000	4.000	8.000
ACC_IND	2,429	0.994	0.667	1.000	1.000	1.000	1.000
ACC_FIN	2,429	0.889	0.000	1.000	1.000	1.000	1.000
NEW_CEO	2,429	0.219	0.000	0.000	0.000	0.000	1.000
INST_OWN	2,429	0.863	0.488	0.792	0.885	0.958	1.000
INSIDER_OWN	2,429	0.058	0.000	0.010	0.024	0.064	0.465
CON_BEAT	2,429	0.354	0.000	0.000	0.000	1.000	1.000
ANALY_FOLL	2,429	15.818	3.000	8.000	14.000	22.000	44.000
INTAN	2,429	0.221	0.000	0.049	0.180	0.355	0.709
SPECIAL	2,429	0.811	0.000	1.000	1.000	1.000	1.000
RISK	2,429	0.103	0.042	0.074	0.097	0.126	0.248
SIZE	2,429	7.857	5.037	6.807	7.723	8.788	11.724
LEV	2,429	0.487	0.122	0.340	0.493	0.624	0.896

firm size (SIZE) is 7.857. The means and medians of firm risk (RISK), firm size (SIZE), and firm leverage (LEV) are not skewed.

The sample's industry composition is shown in Table 2, and the year distribution is shown in Table 3. Table 2 shows that business services make up the largest portion (13.75%), while Table 3 shows that the year distribution changes from the lowest level, 1.11% in 2017, to the highest level, 11.16% in 2010.

Table 2. Distribution of the sample by industry

Industry	N	Percentage
Agriculture	10	0.41%
Aircraft	18	0.74%
Apparel	48	1.98%
Automobiles and Trucks	43	1.77%
Beer and Liquor	1	0.04%
Business Services	334	13.75%
Business Supplies	29	1.19%
Candy & Soda	2	0.08%
Chemicals	66	2.72%
Coal	4	0.16%
Communication	29	1.19%
Computers	88	3.62%
Construction	69	2.84%
Construction Materials	61	2.51%
Consumer Goods	48	1.98%
Defense	6	0.25%
Electrical Equipment	35	1.44%
Electronic Equipment	206	8.48%
Entertainment	7	0.29%
Food Products	75	3.09%
Healthcare	26	1.07%
Machinery	119	4.90%
Measuring and Control Equipment	77	3.17%
Medical Equipment	114	4.69%
Miscellaneous Electrical Machinery	33	1.36%
Non-Metallic and Industrial Metal Mining	18	0.74%
Personal Services	24	0.99%
Petroleum and Natural Gas	116	4.78%
Pharmaceutical Products	105	4.32%
Precious Metals	1	0.04%
Printing and Publishing	12	0.49%
Recreation	27	1.11%
Restaurants, Hotels, Motels	46	1.89%
Retail	221	9.10%
Rubber and Plastic Products	22	0.91%
Shipbuilding, Railroad Equipment	15	0.62%
Shipping Containers	16	0.66%
Steel Works	31	1.28%
Tobacco Products	5	0.21%
Transportation	98	4.03%
Wholesale	124	5.10%
Total	2,429	100.00%

Table 3. Distribution of the sample by year

YEAR	N	Percentage
2007	241	9.92%
2008	256	10.54%
2009	269	11.07%
2010	271	11.16%
2011	252	10.37%
2012	244	10.05%
2013	241	9.92%
2014	217	8.93%
2015	226	9.30%
2016	185	7.62%
2017	27	1.11%
Total	2,429	100.00%

The findings of the correlations between the variables are presented in Table 4, with certain coefficients deserving special consideration. The correlation between SIZE and ANALY_FOLL is 0.7, which suggests that larger firms have larger analyst following. Overall, the correlations are low, and there are few correlations between any of the independent variables, which suggests that the regression model does not have an issue with multicollinearity.

Table 5 displays the results for Hypothesis 1, the coefficient of MBA is significantly positive. The coefficient value of MBA is 0.4171, which suggests that firms managed by CEOs with an MBA are more likely than other firms to disclose non-GAAP earnings. The result shows that CEOs with an MBA are more likely than other business executives to disclose the firm's non-GAAP earnings as a strategic opportunity. The result is similar to the prior literature that managers with MBA degrees may adopt more aggressive strategies such as spending more capital investments, taking on more debt, undertaking more diversification acquisitions, and paying out fewer dividends (Bertrand & Schoar, 2003). In addition, Graham and Harvey (2001) find that CFOs with an MBA use the more sophisticated valuation methodologies than those without an MBA. Thus, Hypothesis 1 is supported. The results provide evidence that how CEO education background influences firms' non-GAAP earnings disclosures.

Table 6 displays the results for Hypothesis 2. Hypothesis 2 states that the positive relationship between CEOs with MBAs and non-GAAP earnings disclosures is weaker for firms with a high-

Table 4. Correlation analysis

Variables	NONGAAP	MBA	ACC_QUA	NEW_CEO	INST_OWN	INSIDER_OWN	CON_BEAT	ANALY_FOLL	INTAN	SPECIAL	RISK	SIZE	LEV
NONGAAP	1.000												
MBA	0.037*	1.000***											
ACC_QUA	0.055***	0.037***	1.000***	***									
NEW_CEO	−0.003	−0.004***	0.003***	1.000***									
INST_OWN	0.080***	0.020***	−0.102***	0.015***	1.000								
INSIDER_OWN	−0.049**	−0.071***	−0.120***	−0.052***	−0.279***	1.000							
CON_BEAT	−0.280***	0.005***	−0.047***	−0.003***	−0.071***	0.018	1.000						
ANALY_FOLL	0.053***	−0.012***	0.110***	0.026***	−0.001	−0.125***	−0.013	1.000					
INTAN	0.278***	−0.012***	−0.021***	0.023***	0.119***	−0.051**	−0.173***	−0.057***	1.000				
SPECIAL	0.360***	0.050***	0.071***	0.034***	0.026	−0.057***	−0.195***	−0.016	0.239***	1.000			
RISK	−0.064***	0.036***	−0.009***	−0.019***	−0.032	0.094***	0.009***	−0.114***	−0.209***	0.014	1.000		
SIZE	0.068***	0.017***	0.199***	0.015***	−0.138***	−0.204***	0.084***	0.676***	0.079***	0.032	−0.447***	1.000	
LEV	0.038***	−0.025***	0.165***	0.037***	−0.048***	−0.053***	−0.022	0.128***	0.046**	0.092***	−0.122***	0.291***	1.000

Note: The Pearson correlation coefficients are reported along the lower diagonal; $n = 2,429$; ***, **, and * represent significance at the 1%, 5%, and 10% levels, respectively.

Table 5. The relationship between MBA-holding CEOs and non-GAAP earnings disclosures

Variables	Expected Sign	Estimate	Standard Deviation	Wald	Pr > ChiSq
Intercept	?	−3.6052	1.3033	7.6516	0.0057***
MBA	+	0.4171	0.1709	5.9611	0.0146**
ACC_QUA	−	1.1327	0.6715	2.8452	0.0916*
NEW_CEO	+	−0.2972	0.1389	4.5761	0.0324**
INST_OWN	−	1.5112	0.6043	6.2539	0.0124**
INSIDER_OWN	−	−0.319	0.8023	0.1581	0.6909
CON_BEAT	+	−0.8959	0.1231	52.9982	<.0001***
ANALY_FOLL	+	0.0254	0.0109	5.3901	0.0203**
INTAN	+	2.032	0.4345	21.8723	<.0001***
SPECIAL	+	1.2839	0.1575	66.462	<.0001***
RISK	+	0.7397	2.2042	0.1126	0.7372
SIZE	+	−0.001	0.0841	0.0001	0.9905
LEV	+	1.231	0.4393	7.8516	0.0051***
INDU_DUM	?	YES	YES	YES	YES
YEAR_DUM	?	YES	YES	YES	YES
Wald 523.3441 <.0001					

Note: $n = 2,429$; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; one-tailed for all coefficients except for those without predicted signs.

Table 6. The moderating effect of audit committee quality on the relationship between MBA-holding CEOs and non-GAAP earnings disclosures

Variables	Expected Sign	Estimate	Standard Deviation	Wald	Pr > ChiSq
Intercept	?	−4.0233	1.3184	9.3121	0.0023***
MBA	+	2.7775	0.9708	8.1854	0.0042***
ACC_QUA	−	1.6193	0.7029	5.3074	0.0212**
ACC_QUA×MBA	−	−2.809	1.132	6.1573	0.0131**
NEW_CEO	+	−0.3048	0.1391	4.8024	0.0284**
INST_OWN	−	1.5084	0.6068	6.1792	0.0129**
INSIDER_OWN	−	−0.4321	0.8082	0.2858	0.5929
CON_BEAT	+	−0.9073	0.1234	54.0312	<.0001***
ANALY_FOLL	+	0.0254	0.011	5.3607	0.0206**
INTAN	+	2.0237	0.4349	21.6549	<.0001***
SPECIAL	+	1.2794	0.1579	65.6864	<.0001***
RISK	+	0.6929	2.209	0.0984	0.7538
SIZE	+	0.00188	0.0842	0.0005	0.9821
LEV	+	1.2352	0.4401	7.8759	0.005***
INDU_DUM	?	YES	YES	YES	YES
YEAR_DUM	?	YES	YES	YES	YES
Wald 524.7897 <.0001					

Note: n = 2,429; ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively; one-tailed for all coefficients except for those without predicted signs.

er-quality audit committee. Hypothesis 2 is interested in the interaction term of ACC_QUA×MBA, which measures how firms with a higher-quality audit committee are affected differently. Table 6 shows that the coefficients of the interaction term ACC_QUA×MBA is significantly negative. The coefficient value of ACC_QUA×MBA is −2.809, which suggests that audit committee quality is important for moderating the positive relationship between CEOs with MBA degrees and non-GAAP earnings disclosures. The second hypothesis is therefore supported. The result is supported by Seetharaman et al. (2014) that non-GAAP earnings exclusions are reduced by audit committees with financial expertise.

The overall results show that the CEOs with MBA degrees are more likely to disclose the non-GAAP earnings than other CEOs. In addition, the audit committee quality negatively moderates the positive relationship between MBA-holding CEOs and non-GAAP earnings disclosure. The results provide implications to stakeholders that the characteristics of managers and the quality of audit committee affect the firm's financial reporting. This study is the first to examine whether CEOs' educational backgrounds affect a company's subsequent non-GAAP earnings. Thus, this study adds to the existing body of work on the topics of non-GAAP earnings reporting and the managerial characteristics. This study also contributes to the literature on the impact of audit committee quality by measuring it based on audit committee characteristics. This study addresses these issues by emphasizing the function of the audit committee in monitoring non-GAAP financial disclosures. Thus, these findings should help regulators and boards of directors evaluate audit committee qualities.

CONCLUSION

Since management knows more than outside investors about the current and predicted future performance of their companies, they may decide to provide investors with non-GAAP earnings to provide additional information regarding earnings performance. However, earlier research has investigated the managerial characteristics underlying the disclosure of non-GAAP earnings. Consequently, the primary objective of this study is to investigate the association between the educational background of CEOs and non-GAAP earnings disclosures. Given that the audit committee is an internal control mechanism

for monitoring firms' financial reporting, this study also examines a moderating effect of audit committee quality on the relationship between CEO characteristics and non-GAAP earnings disclosures. Using logit regression to examine the probability of non-GAAP earnings disclosures, this analysis reveals that firms managed by CEOs with an MBA are more likely than other firms to disclose non-GAAP results. In addition, the quality of the audit committee decreases the positive relationship between MBA holding CEOs and non-GAAP earnings disclosures.

AUTHOR CONTRIBUTIONS

Conceptualization: Hui-Wen Hsu.
Data curation: Hui-Wen Hsu.
Formal analysis: Hui-Wen Hsu.
Funding acquisition: Hui-Wen Hsu.
Methodology: Hui-Wen Hsu.
Writing – original draft: Hui-Wen Hsu.
Writing – review & editing: Hui-Wen Hsu.

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