

# THE EFFECT OF CORPORATE GOVERNANCE ON EARNINGS MANAGEMENT OF ENTERPRISES LISTED ON HOCHIMINH STOCK EXCHANGE, VIETNAM

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**Abstract:** This paper examines the effect of corporate governance mechanism on earnings management of 130 enterprises traded on Ho Chi Minh Stock Exchange (HOSE), Vietnam in 2014. Earnings management is measured by discretionary accruals, and corporate governance is characterized by the CEO duality, board size and board independence. Based on this study, recommendations are made to the policy-makers and standard setters to contribute to limiting this practice in Vietnamese context. To achieve this objective, an empirical analysis is conducted by using the multivariate regression model. The results indicate that while CEO duality and board size are positively correlated with the extent of earnings manipulation, there is no association between board independence and this variable.

Keywords: Earnings management; corporate governance; discretionary accruals; HOSE

## 1 Introduction

Earnings difference before and after auditing is a typical issue reflecting earnings management practices of Vietnamese listed firms [4]. In the 2014 season of auditing report release, this issue was getting more serious and made investors upset when reported earnings of many companies dramatically increased or decreased after auditing, from loss to profit or vice versa [6]. Typically, Petro Vietnam Construction Joint Stock Corporation (PVX) shocked the market by announcing the audited consolidated earnings after tax dropped nearly VND 70 billion, from VND 80.08 billion to VND 10.31 billion; or Construction Joint-stock Company No. 5 (VC 5) reported a loss of VND 17,235 billion instead of a profit of VND 268 million [6]. Earnings manipulation, regardless of underestimation or overestimation, can mislead users of disclosed information in making such important economic decisions as investment, loan or tax [5]. This practice is seriously eroding users' trust on the reliability of information on financial statements. Therefore, it is a big concern of the accounting academic, practitioners, standard setters and policy-makers.

Literature review indicates that certain accounting research has begun to turn to corporate governance to explain the existence and determinants of this behavior due to the conflict of interests between shareholders (principals) and managers (agents) [28]. On one hand, managers often prefer fostering their personal benefit to serving shareholders' purposes. On the other hand, companies do not have owners in the traditional sense. Despite shareholders' right to manage the company by participating in and voting during, the annual general meeting, they act as investors, not owners. While owners focus on the firm performance, investors focus on the risk and return of their stock portfolios. Therefore, investors tend to be inactive shareholders in many firms [19]. As a result, stakeholders always obtain less obvious and later information than their agents. This

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makes difficult for them to make timely and right decision. Therefore, it is necessary for the government to establish the regulation on the roles of all actors in the companies to improve manager's control and enhance the reliability of financial information. Amongst the internal corporate governance mechanism, the board of directors is regulated to ensure the interest of shareholders, and managers are closely aligned [25]. Thus, the board is important to ensure that investors are not led into suboptimal resource allocation decisions based on a view of the accounting numbers as information [22]. While Chief Executive Officer (CEO) duality, board size and independence have been a growing research area, the board is expected to have a special role in assuring that the company's decisions respect the law and regulations, especially with earnings management activities.

In summary, the objective of this paper is to examine the relation between corporate governance and earnings management behavior of Vietnamese firms listed on HOSE. Based on this study, suggestions are made to support users in making right investment decisions and facilitate policy makers, standards setters in setting new policies to limit this behavior.

The structure of this paper is as follows: First, a brief literature review and hypotheses development are discussed, followed by the explanation of research methods. Next, the analytical results are presented. And finally, main points are concluded along with recommendations and limitations.

## 2 Literature Review and Hypotheses Development

#### 2.1 Earnings Management

Earnings management can be defined in many different ways. From some scholars' viewpoints, managers manipulate earnings to publish more informative disclosure and obscure the unpleasant reality. Typical for this perspective is Healy and Wahlen's definition, "earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported earnings" [13, p. 34]. From another viewpoint, Schipper defines earnings management as a manager's intervention in financial information to get personal benefit. This definition points out the manipulation results in managers' opportunistic behavior. Consistent with this argument, Zgarni, Halioui&Zehri (2014) confirmed that this action is undertaken for the benefit of management, not for stakeholders [28]. Regardless of any viewpoint, this behavior is inconsistent with Generally Accepted Accounting Principles (GAAP), significantly inflates net profit [11] and misleads investors, creditors or any party interested in the financial information [8].

#### 2.2 Corporate Governance

The principles of good corporate governance are as old as good behavior, which needs no formal definition. However, building relevant codes and strong laws of corporate governance is the core to improve manager's control as well as the reliability of financial information. According to Nguyen (2014), corporate governance is the system by which organizations are directed and

controlled by senior officers [1]. From this definition, company's senior officers are accountable for the corporate culture they create and must respect the rules they set out for other employees. For example, CEO must be responsible for the company's disclosure, control and financial reporting. Thus, the basic objective of corporate governance is to enhance, maximize the market value of the company, shareholder value and protect the interest of other stakeholders. However, this goal is usually not compatible with the interest of managers, as they prefer to maximize their personal interest, even at the expense of owners. This discrepancy of interest leads to the agency conflict, which is especially severe in public companies where the relationship between shareholders and managers is based on contracts [18]. According to the agency theory, it is the separation of ownership and control that causes these serious internal conflicts of interest. In this case, a possible solution is the use of an effective corporate governance mechanism to deter manager's abuse of authority in pursuing personal purpose, misusing company's funds or manipulating earnings.

#### 2.3 Hypotheses Development

## **CEO Duality**

CEO duality means someone acts as a CEO, while at the same time he or she is also the chairman of the board [28]. According to the Regulation on Corporate Governance applied to firms listed on stock exchanges and issued regarding to the Resolution 12/2007/QD-BTC, "the chairman of the board is not allowed to hold concurrently the role of Chief Executive Officer, unless the accumulation is approved at the annual General Meeting of Shareholders" [3]. However, empirical results on the relationship between CEO duality and earnings manipulation are quite controversial. On one hand, some scholars like Charfeddine, Riahi&Omri (2013) and Zgarni et al. (2014) pointed out that the roles of CEO and chair should be separate. Otherwise, there is a considerable concentration of power on the manager who might abuse for his personal benefit [12]. The control exercised by the board will also be weakened, which means that the board is less likely to constrain earnings management. Theoretically, these arguments are consistent with the bonus-plan hypothesis of the positive accounting theory supposing that the management would apply accounting policies that enable them to satisfy their interests [12]. Drawing on an empirical research conducted on 100 Vietnamese listed enterprises, Pham (2012) also confirmed that the separation of the chairman and CEO roles could contribute to limiting the extent of earnings management [2]. On the other hand, Graven (2009) and Ahmed (2013) found no association between discretionary accruals and the duality of the board [16][9]. To test e association between these variables, the first hypothesis proposes that

*H*<sub>1</sub>: CEO duality is positively associated with earnings management.

#### **Board Size**

It is regulated by the Regulation on Corporate Governance that the board should have from five to eleven members [3]. Interestingly, there is a dichotomy in literature on the impact of the board size on earnings manipulation. Zgarni et al. (2014) argued that there was a significantly positive association between the number of board members and the level of discretionary

accruals. This argument means that the more members of the board are, the higher the occurrence probability of earnings management is. The reason might be a larger board has greater power and resources to perform its duties; however, it is slow in making decisions and more likely to oppose innovation. On the contrary, Karamanou and Vafeas (2005) debated that firms with a larger board had higher-quality financial statements or lower level of earnings management because they had better updates of management earnings forecasts. In addition, Pham (2012), Graven (2009) and Visvanathan (2008) found no association between the board size and the level of earnings manipulation [24]. Therefore, to test the relationship between them, the second hypothesis suggested that

H<sub>2</sub>: The size of the board is positively correlated with earnings management.

#### **Board Independence**

Literature review indicates that non-executive independent board members are motivated to work for the best interest of shareholders [28]. Therefore, the higher the percent of non-executive members of the board is, the lower the extent of earnings management is. The Resolution 12/2007/QD-BTC legalizes that one-third of the total board members is non-executive [3]. Nevertheless, research on the rapport between the board independence and earnings management is argumentative. While the study of Pham (2014) pointed out that the objectivity of the board is positively correlated with earnings management [2], Graven (2009) found no correspondence between these variables [16]. However, somestudies of Zgarni et al. (2014) or Beasley (1996) suggested that the percentage should be increased because it can reduce the extent of earnings management [10]. Based on a study conducted on Taiwanese IPO firms from 1994 to 2001, Jaggi, Chin, Lin, and Lee (2006) also discovered that a higher proportion of independent director is associated with a more effective monitoring mechanism to constrain earnings management [17].Based on these arguments, the third hypothesis is

*H*<sub>3</sub>: Board independence has a negative relationship with earnings management.

In conclusion, the above hypotheses proposed relationships between corporate governance and earnings management. Besides, two control variables, namely firm size and audit quality are examined in the multiple regression equation so that the estimated result will not suffer from the omitted variable bias [23]. These two variables are considered in this study because they were widely tested in the literature review and were found to significantly impact earnings management.

## 3 Methodology

This study uses quantitative methods to evaluate the effect of corporate governance on earnings management of Vietnamese companies. First, the data sources and collection are presented, followed by the measurement of dependent and explanatory variables. Finally, the research model used to test the hypotheses is defined.

#### 3.1 Data Sources

A sample of 130 Vietnamese companies is considered in this study. These sampled firms are selected from the population of companies traded on the HOSE. Firms belonging to such industries as banking, insurance, stock and investment fund are excluded because these sectors use special accounting norms and have different mechanism of operation. This is a cross-sectional study because the studied firms are observed for one financial year ended on 31/12/2014. The data are collected from annual reports, specifically, Income Statements and Cash Flow Statements, collected from the website of the HOSE or each company [7].

## 3.2 Measure Earnings Management by Discretionary Accruals

Consistent with literature, discretionary accruals are used to measure earnings management [12],[9]. According to Vietnamese accounting standards, the Income Statement is prepared based on the accrual accounting. This means that the recognition of revenues and expenses will not depend on the cash flow but the time transactions. The net income is the difference between revenues and expenses. However, the Cash Flow Statement is prepared based on the cash accounting, which means that the accountant is only allowed to recognize revenues and expenses when they are really realized, earned or paid, but not when the time transactions occur. Hence, the accrual is the difference between the net income in the Income Statement and the net cash flow in the Cash Flow Statement as shown in equation (1)

In other words, accruals are "components of earnings that are not reflected in the current cash flow" [11, p. 512]. According to Healy (as cited in Young, 1998), total accruals are composed into discretionary and non-discretionary elements [26]. Discretionary accruals (DA) arise from "transactions made or accounting treatment chosen to manage earnings" [20, p. 372]. Non-discretionary accruals (NDA) arise from "transactions made in the current period that are normal for the firm given its performance level, business strategy, industry conventions, macro-economic events and other economic factors" [20, p. 372]. The equation is as follows:

$$TA_{it} = DA_{it} + NDA_{it}$$
<sup>(2)</sup>

where for the firm *i* in year t, TA<sub>it</sub> is total accruals; DA<sub>it</sub> is discretionary accruals; NDA<sub>it</sub> is nondiscretionary accruals. From the equation (2), discretionary accruals are calculated as:

$$DA_{it} = TA_{it} - NDA_{it}$$
 (3)

According to DeAngelo's model (1986), non-discretionary accruals of this period are total accruals of last period

$$NDA_{it} = TA_{it-1} \tag{4}$$

where TA<sub>it-1</sub> is total accruals of the firm *i*in year t-1. Because this model examines the firm's growth, total accruals are divided by total assets of last period (A<sub>it-1</sub>). Therefore, discretionary accruals are computed as

$$DA_{it} = (TA_{it} - TA_{it-1})/A_{it-1}$$
(5)

9

In summary, discretionary accruals of this year are the difference between total accruals of this year and last year scaled by lagged total assets. This model is based on the assumption that nondiscretionary accruals are constant. After calculating, the conclusion can be made in three cases, if DA<sub>it</sub> = 0: earnings are not managed; DA<sub>it</sub>> 0: earnings are managed upwards; DA<sub>it</sub>< 0: earnings are managed downwards.

## 3.3 Measurement of Variables

The variables used in this study are measured as presented in Table 1, with variable names in the first column; expected signs of hypotheses in the second column and measurement levels in the third column.

Variables	Expected sign	Measurement	
Dependent vari	ables		
DA		Ratio scale (discretionary accruals calculated by (5))	
Independent variables			
CEO_Dual	+	Nominal scale (two levels: 1 if CEO is also chairman of the board, 0 otherwise)	
Board_Size	+	Ratio scale (number of board members)	
Board_Ind	-	Ratio scale (percentage of non-executive independent board members)	
Control variables			
SIZE	+	Nominal scale (two levels: 1 if the firm size is "Large", 0 if the firm size is "Small" or "Medium")	
AUDIT	-	Nominal scale (two levels: 1 if the firm is audited by Big4, 0 if by Non-Big4)	

Table	1. Measuremen	nt of Variables
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#### 3.4 Research Model

In order to test the hypotheses  $H_1$  to  $H_3$ , data collected from the financial and annual reports of the sampled firms are analyzed through a statistical data analysis software package called STATA. The population multiple regression equation is

$$DA = \alpha_0 + \alpha_1 * CEO\_Dual_i + \alpha_2 * Board\_Size_i + \alpha_3 * Board\_Ind_i + \alpha_4 * SIZE_i + \alpha_5 * AUDIT_i + \epsilon_i$$
(6)

After running the regression, the estimated regression equation is

 $\widehat{DA} = \widehat{\alpha}_0 + \widehat{\alpha}_1 * CEO\_Dual_i + \widehat{\alpha}_2 * Board\_Size_i + \widehat{\alpha}_3 * Board\_Ind_i + \widehat{\alpha}_4 * SIZE_i + \widehat{\alpha}_5 * AUDIT_i$ (7)

The coefficients  $\hat{\alpha}_1$ ,  $\hat{\alpha}_2$ ,  $\hat{\alpha}_3$ ,  $\hat{\alpha}_4$ ,  $\hat{\alpha}_5$  estimated from the regression model (7) are used to explain the relationship between the corporate governance mechanism and earnings management as well as to make conclusions about the proposed hypotheses.

## 4 Results and Discussion

#### 4.1 Descriptive Statistics

Table 2 summarizes the descriptive statistics results of variables in the regression model.

Variable	Obs.	Mean	Std. Dev.	Min.	Max.
DA	130	0.0490658	0.504025	-1.357351	4.98602
CEO_Dual	130	0.5538462	0.4990151	0	1
Board_Size	130	5.646154	1.598747	4	10
Board_Ind	130	0.5785959	0.2408216	0	1
SIZE	130	0.8307692	0.3764061	0	1
AUDIT	130	0.5153846	0.5016966	0	1

 Table 2. Descriptive Statistics

With regards to the dependent variable, DA, it indicates that the extent of earnings management of firms listed on HOSE ranges from -1.35, which means a firm managed its reported earnings downwards by 135% in 2014, to 4.98, and managed this figure upwards by 498%. Although the mean value of this variable is quite low (0.049), the standard deviation (0.504) is relatively high. Therefore, it could be seen that earnings management level of studied companies is relatively high. In terms of explanatory variables, first, the mean value of CEO\_Dual is 0.5538, which means that 55.38% of the CEO is also the chairman of the board of directors in Vietnamese firms. Next, the figure on *Board\_Size* reflects the average size of the board that varies from 5 to 6, with the maximum of 10 and the minimum of 4 members, which is quite different from the size range regulated by the Regulation on Corporate Governance that the board should have from five to eleven members. Besides, the descriptive statistics of Board\_Ind shows the mean percentage of the independence non-executive board members is about 57.85%, which is higher than one-third expected by the Resolution 12/2007/QD-BTC. With the group of control variables, SIZE, as shown in Table 2, it can be found that 16.92 percentage of selected firms (22 firms) has the firm size of small or medium and 83.08 percent (108 firms) is classified as large companies. This classification is based on Clause 1, Article 3 of Decree No. 56/2009/ND-CP dated 30/6/2009 of the Vietnamese Government for small and medium-sized enterprises.

SIZE	Freq.	Percent	Cum.
0	22	16.92	16.92
1	108	83.08	100.00
Total	130	100.00	

Table 3. Descriptive Statistics of SIZE

Finally, the average value of *AUDIT* is 0.5153. As shown in Table 4, this variable has taken 63 times the value 0 and 67 times the value 1, which means that 48.46% of the sampled firms was audited by non-Big4 and 51.54% of the companies was audited by Big4.

AUDIT	Freq.	Percent	Cum.
0	63	48.46	48.46
1	67	51.54	100.00
Total	130	100.00	

**Table 4.** Descriptive Statistics of AUDIT

## 4.2 Multivariate Analysis

Table 5 presents the regression results on the relationship between earnings management, which measured by discretionary accruals and characteristics of corporate governance mechanism of Vietnamese firms listed on HOSE. Table 5 indicates that the model is significant with an R<sup>2</sup> of 15.43%.

In terms of the CEO and chairman roles duality, the coefficient  $\hat{\alpha}_1 = 0.19586$  and *p*-value = 0.048 show that the variable *CEO\_Dual* is significantly positive with discretionary accruals at 1% level. Therefore, the first hypothesis of this study is supported, which means that the accumulation of the CEO function and the chairman in an enterprise will increase the extent of earnings management. This empirical analysis result continues to confirm the bonus-plan hypothesis of the positive accounting theory supposing that the management would apply accounting policies that allow them to satisfy their interests, especially when they have more power. This finding is consistent with the conclusion of Charfeddine et al. (2013), Sarkar, Sarkar & Sen (2014) and Zgarni et al. (2014) on the positive impact of the CEO duality on earnings management [21].

In the case of *Board\_Size*, Table 5 also shows that the size of the board is positively correlated with earnings management. It is significant at 1% level with the *p*-value of 0.045 and the coefficient  $\hat{\alpha}_2 = 0.0691626$ ; this confirms the second hypothesis. Thus, it can be concluded that size forms a motivation for managers to manipulate the earnings figures. This finding confirms the conclusion of Yermack (1996) stating that small boards are more effective monitors and controllers than large boards, which is associated with less earnings manipulation [27]. The result is also consistent with the previous study of the scholars Zgarni et al. (2014).

Variable	Coefficient	<i>p</i> -value	
Intercept	-0.8990808	0.075	
CEO_Dual	0.19586	0.048***	
Board_Size	0.0691626	0.045***	
Board_Ind	0.0357139	0.509	
SIZE	0.2901307	0.042***	
AUDIT	0.1730387	0.026***	
Adjusted R <sup>2</sup>	0.1543		
Ν	130		
Note:*, ** and *** represent statistical significance at 0.10, 0.05 and 0.01 levels respectively			

Table 5. Multivariate Analysis Results

In contrary to the findings of many researchers, the board independence (*Board\_Ind*) is found to be insignificantly associated with discretionary accruals with the coefficient  $\hat{\alpha}_3 = 0.03571139$  and the *p*-value of 0.509. Hence, the third hypothesis is rejected. This result points out that the presence of independent board members will not really reduce earnings management behavior and enhance the control mechanism. This finding is consistent with that of Graven (2009) who also failed to detect any significant relationship between earnings management and independent board [16].

In addition, the variable *SIZE* is found to be significant at 1% level with the coefficient  $\hat{\alpha}_4$  of 0.2901307 and the *p*-value of 0.042. This figures show that the firm size has a positive effect on earnings management. Therefore, the larger the firm, the more likely the manager will manipulate earnings downward figures to reduce political costs determined on the basis of accounting figures. This result is consistent with conclusions of Charfeddine et al. (2013). Finally, the variable *AUDIT* has a positive coefficient ( $\hat{\alpha}_5 = 0.1730387$ ) and it is significant at 1% level with the p-value of 0.026. This result is inconsistent with the study of Francis & Wang (2008) concluding that Big 4 provides higher quality audits or less earnings management than non-Big 4 [15].

# 5 Conclusion

This paper investigated the effect of corporate governance mechanism on earnings management of 130 enterprises traded on HOSE, Vietnam in 2014. Three characteristics of board of directors used to measure corporate governance and hypothesized to have the significant impact on this practice have been tested by using the multiple variable regression analysis. The empirical analysis reveals that two out of three factors considered are found to significantly affect earnings management, with two variables (CEO duality and board size) that are defined to have a positive association with earnings management. Therefore, it is possible to conclude that corporate governance has a significant effect on earnings manipulation level of firms listed on HOSE. Based on this study, two recommendations are made to policy-makers and standard-setters to contribute to limiting this practice in Vietnamese context. *First,* from the research results of the impact of CEO duality on the level of earnings mangement, it is suggested to the Ministry of Finance of Vietnam that the role of CEO and chairman of board of directors should be regulated to be separate into two independent people in a company. This separation will improve the effectiveness of the board's monitoring function as well as constraining earnings management behavior. Otherwise, there is a considerable concentration of authority on the manager who might abuse for his personal benefit. *Secondly,* it is suggested that the number of members of the board should be decreased to effectively control the firm.

However, the results and recommendations of this study should be interpreted in light of some limitations which create a fruitful area for future research. *First,* while there are many models to estimate discretionary accruals, such as Ronen and Sadan, 1981; Healy, 1985; DeAngelo, 1986; Dechow and Sloan, 1991; Jones, 1991 (Ronen and Yaari, 2008); Modified Jones model, 1995; Kothari et al., 2005; Raman and Shaharur, 2008 [12], this study employs DeAngelo's model (1986) due to the feasibility of database in the Vietnamese context and research capacity of researchers. The DeAngelo model (1986) is based on the assumption that nondiscretionary accruals are constant. This assumption is unlikely to be empirically descriptive because the nature of the accrual accounting shows that nondiscretionary accruals change in response to economic circumstances [14]. Therefore, the Modified Jones model is recommended to measure earnings management in future research. *Secondly,* this study only uses secondary data collected from the available financial reports which cause limitations in understanding the research dilemma as well as suggesting feasible solutions. Hence, it is recommended that the qualitative approach should be employed by using surveys to collect more responses and opinions from managers and accountants.

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