

# Associations of Board Size, Audit Reputation, and Debt with Financial Restatement: Evidence in Vietnam

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## Abstract

### **Research purpose:**

*The purpose of this study is to look into the contributing factors of the post-audit financial restatement of publicly listed companies in Vietnam. It focuses on the size of the company's board of directors, the audited firm, and the total debt to total assets ratio, as well as whether or not the financial restatement has an impact.*

### **Research motivation:**

*Financial restatements reflect quality of financial statements based on which the users make various decisions. It is important to understand the reasons why companies have to restate their financial statements to ensure informed decisions.*

### **Research design, approach and method:**

*The research uses quantitative method to collect data from annual reports of companies from 2014 to 2020, which is available on Ho Chi Minh Stock Exchange (HOSE) and Hanoi Stock Exchange (HNX) and CAFEF websites. After that, the author utilizes the STATA 15.0 tool to analyze the results through descriptive statistics, correlation coefficient, and Logistic Regression.*

### **Main findings:**

*The findings indicate that the total debt to total assets ratio had a significant relationship to the incidence of financial restatement, whereas board size and audit reputation did not appear to affect the incidence of financial restatement.*

### **Practical/managerial implications:**

*The research contributes to the understandings of specific factors influencing financial restatement in a the context of Vietnam while also providing useful information for auditors and investors on how to identify inaccurate information on annual reports and make appropriate decisions*

**Keywords:** Financial Restatement, Board size, Audit Reputation and Total debt to total assets.

## 1. INTRODUCTION

Financial statements have been discussed since the early 1980s; however, since the global accounting and auditing crisis and high-profile fraud cases, such as Enron and WorldCom in the United States, research on this subject still are interested by both researchers and practitioners (Dutta *et al.*, 2017; Bouteska, 2019; Huang *et al.*, 2020; Barber and Hollie, 2021).

In Vietnam, it was discovered that companies with profit errors account for a relatively large proportion, fluctuating around 74% of the total number of companies listed on the stock market of Vietnam for 5 years

(2014-2018). Specifically, this rate is 70%, 75%, 73% 80%, and 72% respectively, for the years from 2014 to 2018. With 297,516 million VND in faults, 2016 was the year with the most (Le Ngoc Tuyet, 2020). According to a typical report conducted by the Vietnam Oil and Gas Construction Joint Stock Corporation under the Vietnam Oil and Gas Group, the largest number of errors in 2016 was 65,433 million VND. As a result, the after-auditing profit gap decreased 65,433 million VND compared to the original financial report's 157,156 million VND. The decrease in profit from these consolidated statements was due to a change in the subsidiary's reports, leading to the revaluation of the consolidated report after the audit, these items such as provision for doubtful debts, unrealized profits, and financial investments of certain member companies of the Corporation, just as to PVX's explanation report from 2016 (Vietstock, 2020).

The restatement of financial statements before and after-auditing reports of public listed companies is becoming incredibly common not only in Vietnam but also in other countries, such as the United States, Canada, China, Iran, and Malaysia. This problem lowers the accuracy of financial reports, leading to users being misled when making investment decisions, which has a significant impact on the stock market's resource allocation performance. Additionally, firms that restated their financial statements suffered significant market value losses (Palmrose, 2004; Karpoff, 2008), increases in the cost of capital (Hribar, 2004), and high executive turnover (Srinivasan, 2005; Hennes, 2008) because of a given firms previously released low-quality financial information, restatements call the credibility of future financial reports into question.

Various empirical studies have been concerning factors such as corporate board characteristics (Beasley, 1996; Srinivasan, 2005; Lobo, 2013), audit quality (Kenney, 2004; Francis, 2013; Lobo, 2013), or ownership factors (Shleifer, 1997; Khanna, 2000), which might affect financial restatements globally in terms of fraud and errors. In the context of Vietnam, even though factors influencing financial restatement have started to be concerned by investors and researchers (Hà and Công Lý, 2014; Tân and Duong, 2016; Huong, 2018), this type of research, this type of research has been rare. This study aims to investigate factors affect the financial restatements of listed Vietnamese companies over a seven-year period (2014 -2020).

## **2. LITERATURE REVIEW AND HYPOTHESES**

### **2.1 Definition of Financial Statements**

According to Law No 88/2015/QH13, A financial statement is defined as an economic and financial information system of an accounting unit presented in a form prescribed by accounting standards and accounting regimes. According to the Minister of Finance Decision No. 234/2003/QĐ-BTC dated 30 December 2003, Financial statements are a structured financial representation of the financial position of, and the transactions undertaken by an enterprise. The objective of general-purpose financial statements is to provide information about the financial position, performance, and cash flows of an enterprise that is useful to a wide range of users in making economic decisions. To meet this objective, financial statements provide information about an enterprise's assets, liabilities, equity, revenue, other income, expenses, gains and losses, and cash flows. And it also stated, "this information, along with other information in the notes to financial statements, assists users in predicting the enterprise's future cash flows and in particular the timing and certainty of the generation of cash and cash equivalents."

### **2.2 Definition of Financial restatements**

Financial restatement involved a process of revising and amending the financial statement, which was issued beforehand to rectify errors and non-compliance with

GAAP (Abdullah, 2010). Accordingly, the General Accountability Office (GAO) (2002) clarified, "A financial restatement occurs when a company, either voluntarily or prompted by auditors or regulators, revise public financial information that was previously reported".

Financial restatement may also be described as "corrections of accounting misstatements made previously by negligent, or in the extreme, opportunistic managers" (Baber, 2009). In other words, financial restatements refer to the restatement of previously published financial reports when the auditors found out its errors on financial reports (Mao, 2018). Financial restatements tend to have effects on the income statement, which cause differences in profit profit-before-tax before and after the audit.

## **2.3 Theoretical Background**

### **2.3.1 Agency theory**

According to the agency theory of Jensen & Meckling (1976), firm managers may represent their own interests, such as acting to increase their pay, bonuses, job security, or prestige, but these actions may damage the owner's interests because the objectives of managers and shareholders (maximizing company profit) differ. Managers (agents) had a large influence on the details contained in published financial statements, which are strongly influenced by agency theory, economic institutions, and the public's choice (Watts, 1977). Along with that, the financial statements are the information system that employers use to track managers' actions. According to Watts (1977), financial statements are a result of both market and political processes, as well as the relationships between individuals and groups involved in these processes. Therefore, the principals care about the financial condition of companies via financial statement. If so, the manager wishes to complete the target-profit as the shareholders want at the beginning of the year, then the manager's ability to manipulate the financial statements, by which the information on the financial statements is made by the company and announced by the company, is far different from the reality of the company.

In addition, even though the company did not accomplish the target, managers have tended to announce business results that are equal to or exceed the target expected by shareholders. As a result, financial statements prepared by public listed companies on their own and announced without auditing are likely to be inaccurate. Until independent auditors audit the company's financial statements, auditors found that the information that managers announced was not accurate and asked managers to correct it. The financial statements, therefore, will be restated after the audit.

The application of theory: The agency theory is a model that explains why people falsify financial statements. It also clarifies the relationship between the corporate governance structure, audit supervision, and the

restatement of financial statements (Murya, 2010). Agency theory investigates disputes, and it is now an integral aspect of economic theory (Jensen, 1986). The term "agency theory" refers to a relationship of representation between an owner and an agent, or between a company representative and creditors, which results in a conflict of interest. It discussed the possibility that if the manager is paid a salary or a performance-based incentive, the manager can complete the target profit set by shareholders (Schipper, 1989; Jones, 1991.). As a result, this might lead to inaccuracy of profit details on the company's financial statements.

Agency theory also reflects the ability of corporate governance as the character of Board of Directors (BOD). The reputation of audit firms hired to audit financial statements. As a mechanism for external supervision of the company, it can limit the manager's profit management behavior. Therefore, the audit quality might be associated with the possibility of financial restatement.

### **2.3.2 Signaling theory**

According to Spence (2002), signaling theory and information asymmetry have significant relationships. Information has an impact on the decision-making of individuals in households, businesses, and government, based on public and private information, which is freely available to access in the public. Information asymmetries occur when "different people know different things." Since some information is private, information asymmetries arise between those who hold all the information and those who could potentially use it to make decisions. The managers of the firms, as internal supervisors, know more about their firms' quality than outside investors. The manager may just show ideal information, which indicates the company's financial wealth, to shareholders. With imperfect information, investors are unable to differentiate between high-quality firms and low-quality firms (George J. Papaioannou, 2017)

Previous studies provided some explanations between financial ratios and firm quality. Firm debt and dividends are indicators of firm quality. Only high-quality companies, according to these models, can make long-term interest and dividend payments. Low-quality businesses, on the other hand, would be unable to make such payments. As a result, external observers' expectations of firm efficiency (for example, lenders and investors) are influenced by such signals (Ross, 1973; Bhattacharya, 1979). With the use of signal theory, it helps to understand why high-quality firms can follow the accounting regime and guidelines when preparing and reporting financial statements, resulting in more accurate and fair financial statement details for users and fewer errors than low-quality companies.

The application of theory: Public listed companies invest in their information systems by recruiting credible independent auditing firms to signal users of financial statements that an organization discloses reliable

financial information. Public listed companies give a message of the accuracy in financial statement information to the market through the way of hiring quality auditing firms (Big4 group auditing firms) to perform an annual financial statement audit. As a result, when preparing and reporting their financial statements, these organizations will adhere to the accounting principles and accounting regime, leading to the financial statements prepared and published by this corporation containing fewer errors than those prepared and published by other firms, making it less likely that the financial statements will be restated after the audit.

### **2.3.4 Fraud Triangle theory**

Cressey (1953) suggested the Fraud triangle theory, which consisted of three conditions (Incentive/Pressure, Opportunity, and Attitude/Rationalization), must be presented due to the occurrence of criminal behavior. In three features, Incentive/pressure easily leads to unethical actions. Any case of fraud originated from the pressure, namely the financial pressure or non-financial pressure (Albrecht, 2008) or political and social categories (Murdock, 2008). However, the majority of fraud frequently derives from financial conditions.

The application of theory: When a public listed company experiences unprofitable or cannot achieve its target profit, and managers are more likely to publish profit information on financial statements by the company that far exceeds the reality of the company; or when a company has a high debt ratio, it is said that the company is under debt pressure. Managers are likely to publish gains on their self-made financial statements that surpass the actual amount in the potential loan deal. Moreover, managers must publish profits on their self-created financial statements that exceed the true figure to attract the future loan contract. When audited, it was discovered that the amounts made by managers were far from the reality of the company, which easily leads to listed companies re-presenting their financial statements after auditing at the request of auditors.

## **2.4 Prior Studies on Financial Restatement**

According to a number of previous studies, the rise in financial restatements has raised concerns about the adequacy of corporate governance practices and financial disclosure (Beasley, 1996; GAO, 2002; Abdullah, 2010). Particularly, the level of board independence or audit quality has an impact on the likelihood of a listed company's financial restatement (Hasnan, 2015). In addition, Marwan Altarawneh's (2020) research evaluated the CEO characteristics influencing the occurrence of financial restatement (Altarawneh *et al.*, 2020); and Francis and Yu's (2013) thesis demonstrated that the audit quality from the Big 4 accounting firms can affect the financial restatement of listed companies as well (Francis, 2013).(Bhattacharya, 1979)

In Vietnam, it is emphasized that Nguyen Van Huong's (2018) research can summarize these factors that may

have an impact on the financial restatements of listed companies in Vietnam's stock market. To be more specific, he mentioned corporate governance (Board size, Board independence), audit quality from Big 4 accounting firms and the change in audit firms compared to the previous year, financial information (Debt ratio, or Pressure on previous profit). This thesis focuses on the examination of the relationship between financial restatements of listed companies in Vietnam and three major factors, namely Board size, Audit Reputation, and Corporate Governance.

## **2.5 Hypothesis formulation**

### **2.5.1 Board size and financial restatement**

Every Board should examine its size to ensure that there are enough members to discharge responsibilities and perform various functions. Hence, it is guaranteed that boards of different sizes should have different levels of monitoring capability (Kim *et al.*, 2012). As it can be known that the main role of board size is monitoring an internal mechanism with the potential reduction of agency costs (Kim *et al.*, 2012). The larger the board of directors, the more information there will be, and thus the higher the board's leadership performance (Dalton, 1998).

According to the OECD (2015), the Board evaluates the number of director positions regularly to ensure that the board is small enough to facilitate discussion of the contents in which each director can participate while also being large enough to provide a diverse range of professional backgrounds (OECD, 2015). In addition, according to the OECD (2015), the number of members on the Board of Directors should be no less than three and no more than fifteen. Many previous studies have found that board size has an impact on managerial supervision. Furthermore, the Beasley 1996 study not only states that the board member, but also the size of the board, has an impact on the financial statement fraud and the restating of reports after auditing. In contrast, more studies on the link between the size of the board and restoration events have failed. (Ahern & Dittmar, 2012; Ku Ismail & Abd Rahman, 2011; Srinivasan & Richardson, 2005; Veronica & Bachtiar, 2005). Hence, this research examines the association between board size and financial restatement. The hypothesis will be formulated as:

H1: There is a negative relationship between board size and the incidence of financial restatement.

### **2.5.2 Audit reputation and financial restatement**

An external monitoring mechanism may be seen as an independent auditor, who takes responsibilities of monitoring, evaluating the internal control system of a corporation and auditing its financial statements (detecting and avoiding mistakes relating to the financial statements of a listed corporation). An independent audit ensures reliability of financial statements. The audit of high quality could enhance the reliability of financial statements (Zhizhong, 2011). Thus, the quality of

auditing service depends on the quality of the independent auditing firm and its reputation.

Many previous studies found that companies whose financial statements are audited by reputable auditing firms are less likely to materially misstate financial statement than low-quality auditing firms. For instance, big four is known for its reputation of auditing standard quality and auditors in the big four auditing firms have more expertise, so their clients (public listed companies) can apply accounting regimes and accounting standards to make better financial statements. Therefore, the financial statements self-made by public listed companies is fewer errors. When, on the other hand, the firm hires a reputable auditing firms to audit its financial statements, it signals to the market that the company's financial statements will be of higher quality (Francis, 2013).

Francis and Yu (2009) discovered evidence that the Big 4 group has a negative correlation with the financial restatement. This demonstrates that in companies audited by the Big 4 group of financial statements, the likelihood of financial statement representation is lower than in other companies. According to Francis and Yu (2009), the auditing firms of the Big 4 group are the most reputable in their same industry. According to them, the auditing firms in the Big 4 group are those belonging to the following auditing firms: Price Waterhouse Coopers (PWC), Deloitte Touche Tohmatsu (Deloitte), Ernst & Young (E&Y), and KPMG. As a result, this research expects public listed companies in Vietnam audited by auditing firms from the Big 4 group have a lower likelihood of financial restatement than those audited by auditing firms from outside the Big 4 group. This research will test the hypothesis as follow:

H2: There is a negative relationship between the reputation of audit firms and the likelihood of financial restatement.

### **2.5.3 Debt to Total Assets Ratio and financial restatement**

Information on the financial report is of particular importance to the signing of contracts (Watts, 1986). In other words, the demand for debt contracts for accounts is an important force that shapes accounting rules and the practice of financial reporting. As it can be known that most debt contracting buildings are future oriented. The lender must rely on the financial statements to ensure the ability of companies' repayment in the future when setting out the terms of the loan agreement (Li, 2010). Therefore, the manager has to publish the company's financial statement information far beyond the actual amount reached by the company to fulfil the loan contracts, which is selected contracting variables from a menu of financial statements accounting numbers.

Many past studies have shown that high debt companies are more likely to reproduce their financial statements (Kinney, 1989; Defond, 1991). In a study carried out in Malaysia, this evidence also coincides with Abdullah et

al. (2010). They also found that high-debt companies are more likely to misrepresent financial statements. Similar evidence has also been found in Vietnam by the research of Tân and Duong (2016). Typically, the higher the debt ratio of the company, the more difficult the financial condition, and thus, to receive credit contracts, managers tend to report profits higher than the company achieved to prove that the company’s ability of repayment debt (Watts, 1986). As a result of this study, high-debt companies are expected to have a higher likelihood of re-establishment than low-debt companies. The hypothesis will be developed as follow:

H3: There is a positive relationship between the debt ratio and the likelihood of financial restatement.

**2.6 Conceptual framework of the study**

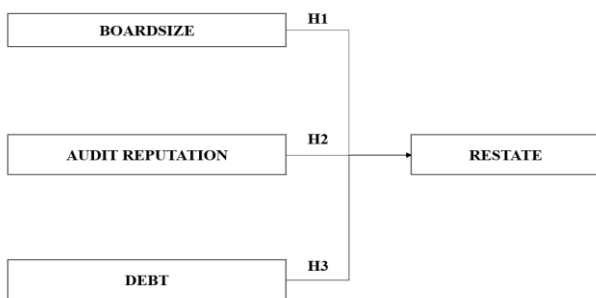


Figure 2.1: Research Framework

Where: RESTATE stands for financial restatement and DEBT stands for Debt to asset ratio

**3. RESEARCH METHODS**

**3.1 Sample and Data Collection**

The sample used in this study included all 142 listed companies in the Vietnam Stock Exchange (HOSE and HNX) over a 7-year period. Due to the unique characteristics and specific regulations and rules, the sample does not include the special major of banks, trusts, closed-end funds, exchange-traded funds, and insurance companies, as previously studied. Data on these characteristics (restate, audit reputation, board size, and debt to total assets) were hand-collected from audited annual reports available on the Vietnam Stock Exchange (HOSE, HNX) and cafev.vn. Income before tax before the audit was gathered from financial statement published on the CAFEF website for each year throughout the given period of 7 years (2014 to 2020). Income before tax after audit was collected from financial statements published on the Ho Chi Minh Stock Exchange. Then author will compare the income before tax between before and after the audit. If the difference in the percentage of income before tax between the two figures is greater than 5%, it signifies by code 1 in the STATA software, indicating that the firm had a financial restatement in that year. On the contrary, it is represented as code 0 in the STATA software. If the difference in the percentage of income before tax between the post-audit and after-audit is greater than 5%, it signifies by code 1 in the STATA software, indicating that the

firm had a financial restatement in that year. On the contrary, it is represented as code 0 in the STATA software.

**3.3 Construct measures**

In this study, the financial restatement is measured by percentage difference between profit-before-tax before and after audit. according to the VACPA (2012), if the difference is 5%, it considers as significant restatement. Therefore, the adjustment rate of 5% (higher or lower) of profit before tax used as a basis to determine the financial statements is in line with VACPA (2012) guideline.

The measure of restatement of financial statements in this study is calculated as the formula:

$$\text{The percentage} = \frac{\text{The amount after audit} - \text{The amount before audit}}{\text{The amount before audit}} \times 100\%$$

Profit before tax was chosen as an indicator because users of financial statements immediately care for it when being reported by listed companies (Huong, 2018). When profit changes, it has a significant impact on and share price and investors’ decisions if company significantly restate profit after the audit. Any material change (increase/decrease) in earnings information compared to previous announcement will have a significant impact on shareholders and investors.

Table 3.1 describes construct measures of the study.

Name of variable	Measurement	References
<b>Dependent variable</b>		
RESTATE	Ater the audit, a company has a restatement of at least 5% difference the profit before tax is coded as 1, otherwise is coded as 0.	Abbott (2004), Lobo & Zhao (2013), Ahmed & Goodwin (2007)
<b>Independent variables</b>		
BOARD SIZE	The number of board members	Lobo & Zhao (2013)
AUDIT REPUTATION	Financial statement in year t audited by BIG 4 is 1, otherwise 0	Zhizhong (2011), Francis & Yu (2009)

DEBT	The percentage of total debt to total assets  Debt ratio = $\frac{\text{Total Liability}}{\text{Total Assets}}$	Ahmed & Goodwin (2007), Abdullah (2010)
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Table 3.1 The measurement of variables

### 3.4 Model Specification

The research utilised a well-established model employed in the previous studies (Abdul Wahab, 2014). The dependent variable is financial restatement (RESTATE), while the independent variables are BOARD SIZE, AUDIT REPUTATION, and DEBT.

$$\text{RESTATE}_{it} = \beta_0 + \beta_1 \text{BOARDSIZE}_{it} + \beta_2 \text{AUDITFIRM}_{it} + \beta_3 \text{DEBT}_{it} + \epsilon_{it}$$

Where:

**BOARD SIZE<sub>it</sub>**: The number of board members in company i in the final year t

**AUDIT REPUTATION<sub>it</sub>**: The company i audited by BIG 4 in the end of year t

**DEBT<sub>it</sub>**: The percentage of total debt to total assets of the company i in final year t

## 4. DATA ANALYSIS AND FINDINGS

### 4.1 Descriptive Statistics

The table 4.2 shows descriptive statistics that over 7 years (2014 – 2020).

VARIABLE	OBS	MEAN	STD.DEV	MIN	MAX
RESTATE	994	.164	.370	0	1
AUDIT REPUTATION	994	.542	.498	0	1
BOARD SIZE	994	6.876	1.836	1	13
DEBT	994	.451	.2188	.0026	.970

Table 4.2: Descriptive Statistics

RESTATE variable has mean as 0.164584 (min = 0 and max = 1), with the minimum value of 0 and the maximum value of 1. The mean of AUDIT REPUTATION variable is 0.5422535 (min = 0 and max = 1). For BOARD SIZE, the average number of board member of directors is about 6, with a minimum of 1 and a maximum of 13. The mean of DEBT 0.4514694 (min = 0.0026735 and max = 0.9706117).

There are 994 observations for 142 companies over a 7-year period (2014–2020). If the profit-before-tax indicator is greater than or less than 5%, it indicates a material financial restatement after-audit of listed companies in Vietnam. There are 64 financial restatements have a profit-before-tax indicator that is greater than 5% higher than it was in the prior-audit financial statement. Furthermore, 80 financial restatements have a profit-before-tax indicator that is less than 5% lower than it was in the prior-audit

financial statement. Revenues, cost of goods sold are most popular restated items (Table 4.3)

Reasons	Total financial restatement after-audit	Increased adjustment	Decreased adjustment
Revenue	63	43	20
Cost of goods sold	71	12	59

Table 4.3: Indicators cause financial restatement

In the term of revenue from sales and services, there are 63 out of 142 firm restated financial statements after the audit during 7 years. The number companies understated their revenues is greater than those overstated their revenues. There are 43 firms must an increase in their revenues after the audit whereas 20 firms must adjust a decrease in their revenues after the audit. Regarding, cost of goods sold (COGS), there are 71 firms restated the financial reports after the audit of which 12 firms restated an increase in COGS.

### 4.2 Correlation Coefficient

The Table 4.4 shows that there is no multicollinearity among three independent variables (BOARD SIZE, AUDIT REPUTATION, and DEBT) because the sig is all higher than 5%, with (0.1203), (0.6502), and (0.0559) respectively showing the miscorrelation between BOARD SIZE and AUDIT REPUTATION, DEBT and AUDIT REPUTATION, BOARD SIZE and DEBT.

Debt has a positive correlation with financial restatement ( $\beta = 0.0026$ ,  $p < 0.05$ ). In contrast, Board size and the audit reputation is found to have no association with financial restatement due to p-value is greater than 5%.

	RESTATE	AUDIT REPUTATION	BOARD SIZE	DEBT
RESTATE	1.0000			
AUDIT REPUTATION	-0.0366 (0.2439)	1.0000		
BOARD SIZE	-0.0227 (0.4744)	0.0492 (0.1213)	1.0000	
DEBT	0.0955* (0.0026)	0.0144 (0.6502)	-0.0707 (0.0559)	1.0000

\*. Correlation is significant at the 0.05 level (2-tailed)

Table 4.4 Correlation Coefficient results

### 4.3 Binary Logistic Regression

Table 4.5 show Logistic Regression results of the model.

RESTATE	COEF.	Z	P> Z
AUDIT REPUTATION	-.2183043	-1.27	0.205
BOARD SIZE	-.0211245	-0.44	0.658
DEBT	1.227434	3.03	0.002**

CONS	-1.940632	-4.78	0.000
Number of obs	994		
LR Chi2 (3)	11.27		
Prob > Chi2	0.0103		
Pseudo R <sup>2</sup>	0.0127		

\*\* p < 0.05 (1-tailed test)

Table 4.5 Logistic Regression results

DEBT has a positive relationship with the financial restatement ( $\beta = 1.227$ ), and p-value < 0.05). The Audit reputation and Board size has no relationship with financial restatement (p-value > 0.05).

The formula will be estimated as:

$$\text{Log} \left[ \frac{P(y=1)}{1-P(y=1)} \right] = -1.94 + 1.227 \text{ DEBT}_{it}$$

Looking at the table 4.6, the coefficient (COEF) is known as the odds of probability of financial restatement compared to probability of non-restating the financial reports. In particular, as the DEBT coefficient is positive ( $\beta = 1.227$ ), it means that between two companies, a company with a unit change (increase by 1%) in the percentage of total debt to total assets (DEBT) will increase the chances of restating the financial statement by 1.227 times or increase 22.7% of possibility of financial restatement.

In the term of Pseudo R<sup>2</sup>, from the result of table 4.5, Pseudo R<sup>2</sup> is indicated as the value of 0.0127 or 1.27%, which is relatively low. It means that 1.27% of dependent variable (RESTATE) is analyzed by these independent variables in model. To be more specific, as Board size and Audit reputation showed that there is no correlation with the financial restatement of listed companies in Vietnam. Therefore, Pseudo R<sup>2</sup> demonstrated that 1.27% of a change in dependent variable (RESTATE) is analyzed by the independent variable of DEBT. And the remaining of 98.73% will be analyzed by other factors (out of this research) affecting the financial restatement of companies in Vietnam.

Normally, the R<sup>2</sup> threshold must be greater than 50% in order for the model to be suitable. However, not all R<sup>2</sup> coefficients must be greater than 50% because it is difficult to forecast stock prices or the possibility of financial restatement using only independent variables such as GDP, ROA, ROE, and relating to financial information. According to McFadden (1974), he claimed that the value with recommended being that 0.2 to 0.4 would be excellent. However, in other studies, especially related to financial models, Pseudo R<sup>2</sup> is just lower than 0.2. For instance, according to Marwan Altarawneh (2020), the author examined the relationship between CEO characteristics and financial restatement in Malaysia, which showed the result of Pseudo R<sup>2</sup> was 0.0416 with 15 factors found or (Hasnan, 2015) got the result of Pseudo R<sup>2</sup> 0.12 with the factors related to corporate governance, financial performance and board independence, and audit quality.

The result of Odds Ratio (Table 4.6), it is used to classify the strength of the association between the dependent variable (RESTATE) and Independent variable (DEBT). The odds ratio of variable DEBT shows the value of 3.371, which is greater than 1, means that the percentage of total debt to total assets has an association with the possibility of financial restatement. In addition, the presence of DEBT raises the probability of financial restatement in public listed companies.

RESTATE	ODDS RATIO	Z	P> Z
DEBT	3.371	3.03	0.002
CONS	.1115	-10.24	0.000

Table 4.6: The result of Odds Ratio

The probability of restating the financial statement is 17% (there are 168 financial statements restated in the total of 994 samples). Therefore, the real probability when the original probability equal 17% is defined as:

$$P = \frac{e^{(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3)}}{1 + e^{(\beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3)}} = \frac{\text{Odds Ratio}}{1 + \text{Odds Ratio}}$$

The result indicates  $P = \frac{\text{Odds Ratio}}{1 + \text{Odds Ratio}} = \frac{3.371}{1 + 3.371} = 77.1\%$ , increase by 60.1%, compared to the original probability based on the descriptive statistics. It means, holding all other factors constant, if publicly traded companies increase the ratio of total debt to total assets by 1 percent, the probability of restating financial statements after audit is 77.1 percent, up 60.1 percent from the beginning.

## 5. CONCLUSIONS

### 5.1 Conclusion

This study investigated three potential factors, namely Board size, Audit Reputation, and Debt, impact financial restatement over a 7-year period (2014-2020). Data were collected from financial statements of 142 listed companies by hands. The result indicates that an increase in the percentage of total debt to total assets leads to an increase in the financial restatement of each public listed company.

### 5.3 The Contribution and Implication of the study

By examining financial information (DEBT) and non-financial information (Board size and Audit Reputation) to the financial restatement in Vietnam, this research has made several contributions to the literature and the body of knowledge in understand factors impacting financial restatement in a certain context like Vietnam. . Furthermore, this study will be useful for future researchers who are interested in conducting research similar to this study in terms of financial restatement quality, as well as this study allows them to evaluate the factors that impact financial restatements in Vietnam.

The research findings provide shareholders and investors with an overview of the factors among the DEBT ratio that should be emphasized more in order to bring high financial reporting quality to the firms, and auditors can consider for testing the financial reports to ensure that they are reliable and accurate. As a result, it can reduce financial information inaccuracy and avoid future reports restatement.

## 5.2 Limitation of the study

The study has several limitations, and the findings are not intended to provide a comprehensive explanation of the factors that influence financial restatement, but rather to provide some information about the role of specific factors. The financial restatement may be affected by other factors that are not mentioned in this research because it just considered as three factors based on previous studies to examine the occurrence of financial restatement in companies in Vietnam. Unluckily, the results found that two out of three factors have no correlation to the possibility of financial restatement in Vietnam. Therefore, the research model is weak to show how these factors influence the financial restatement in Vietnam.

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