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CÁC NHÂN TỐ ẢNH HƯỞNG ĐẾN QUẢN TRỊ LỢI NHUẬN: TRƯỜNG HỢP CÁC DOANH NGHIỆP NIÊM YẾT TẠI VIỆT NAM

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Tóm tắt

Nghiên cứu này xác định các nhân tố ảnh hưởng đến quản trị lợi nhuận trong các doanh nghiệp niêm yết tại Việt Nam. Sáu nhân tố được thực hiện bao gồm số lượng thành viên của hội đồng quản trị, chủ tịch hội đồng quản trị kiêm tổng giám đốc, quy mô đơn vị kiểm toán, hiệu quả hoạt động tài chính, quy mô doanh nghiệp và đòn bẩy tài chính. 441 quan sát thu thập dựa trên dữ liệu trích xuất từ nền tảng Fiinpro, bao gồm thông tin từ năm 2017 đến năm 2019 của 147 doanh nghiệp sản xuất niêm yết trên Sàn giao dịch Chứng khoán Thành phố Hồ Chí Minh (HOSE). Dữ liệu bảng được đo lường qua mô hình Jones (1991) và mô hình hồi quy. Kết quả cho thấy hai nhân tố chủ tịch hội đồng quản trị kiêm tổng giám đốc và đòn bẩy tài chính ảnh hưởng thuận chiều với quản trị lợi nhuận. Ngược lại, hai nhân tố bao gồm số lượng thành viên hội đồng quản trị và quy mô đơn vị kiểm toán quan hệ ngược chiều với quản trị lợi nhuận. Trong khi đó, hiệu quả hoạt động tài chính và quy mô doanh nghiệp không phải là yếu tố tác động đến quản trị lợi nhuận. Nghiên cứu này bổ sung thêm bằng chứng về quản trị lợi nhuận, đồng thời đề xuất một số khuyến nghị cho người sử dụng báo cáo tài chính khi đưa ra những quyết định kinh tế đối với các doanh nghiệp niêm yết.

Từ khóa: Quản trị lợi nhuận, Nhân tố, Doanh nghiệp niêm yết, Việt Nam.

FACTORS AFFECTING EARNINGS MANAGEMENT: THE CASE OF LISTED FIRMS IN VIETNAM

Abstract

This study identifies factors affecting earnings management in the case of listed firms in Vietnam. Six factors, which include the number of management board members, the duality relationship

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chairman-director, auditor size, financial performance, firm size and financial leverage, are examined. Data of 147 manufacturing firms listed on Ho Chi Minh Stock Exchange from 2017 to 2019 is extracted from Fiinpro platform, resulting in 441 firm-year observations. Panel data is processed using model of Jones (1991) and the regression model. The results show that two factors which are the duality relationship chairman-director and financial leverage have positive effects on earnings management. In contrast, two factors including the number of members in board of management and auditor size is negatively related to earnings management, while financial performance and firm size is not determinants of earnings managements. This study provides more evidence regarding earnings management and proposes some recommendations to financial statements users when making economic decisions about listed companies.

Keywords: Earnings management, Factors, Listed firms, Vietnam.

1. Introduction

Earnings management is a topic that researchers around the world, such as Healy (1985), DeAngelo (1986), Jones (1991), Dechow and Sloan (1991), Friedlan (1994), etc, have been interested in studying. Earnings management greatly affects the interests of shareholders in specific and the company in general. It erodes investor confidence in the stock market. Moreover, the goal set by the Government and the Ministry of Finance to "protect investors" is also not achieved.

With the prominence of the subject as presented above, this study is conducted on the topic: "**Factors affecting earnings management: The case of listed firms in Vietnam**", with aim to identify factors affecting levels and its direction impact to earnings management. Through this study, users of listed companies' financial statements have a better understanding of how to make economic decisions. Additionally, several recommendations are made based on the findings for diminishing earnings management and improving financial data in publicly traded companies' financial statements.

Previous studies (Swastika – 2013, Omar – 2012, Rahmani – 2013) have been conducted in developed countries where there are developed stock markets, strict investor protection laws, and clear and transparent corporate governance mechanisms. Meanwhile, this study is conducted in the context of the stock market of Vietnam - a developing country with an emerging and fledgling stock market. This is a research gap, is a motivation to search for evidence on earnings management of listed companies in the Vietnamese stock market. In addition, most of the previous studies used the model of Jones (1991), including studies in Vietnam (Nguyen, 2014). Therefore, this study inherits previous studies and uses the above model to conduct research.

This study includes 5 sections: (1) Introduction, (2) Literature review on factors affecting earnings management, (3) Research methodology, (4) Research results and discussion, (5) Conclusions and recommendations.

2. Literature review on factors affecting earnings management

2.1. Concept of earnings management

Earnings management is understood as the act of adjusting profits within the framework of the accounting system in order to achieve management goals. In other words, earnings

management is performed through the flexible application of accounting policies to achieve management goals (DeAngelo, 1986; Jones, 1991).

2.2. Models to identify earnings management

2.2.1. Model of Healy (1985)

$$\mathbf{NDA_{it}} = \frac{TAit}{Ait-1}$$

In which:

NDA_{it} is the non-discretionary accruals in year t of company i

TA_{it} is the total accruals of year t of company i

A_{it-1} is the total assets of year t-1 of company i

This model has a limitation as it assumes that the NDA is constant over time.

2.2.2. Model of Jones (1991)

$$\frac{\mathbf{TAit}}{\mathbf{Ait-1}} = \alpha_0 \frac{1}{\mathbf{Ait-1}} + \alpha_1 \frac{\Delta \mathbf{REVit}}{\mathbf{Ait-1}} + \alpha_2 \frac{\mathbf{PPEit}}{\mathbf{Ait-1}}$$

In which:

$\Delta REVit$ is the change in revenue for company i from year t-1 to t;

$PPEit$ is the property, plant and equipment of company i in year t.

According to Aljifri (2007), model of Jones omitted the manager's revenue adjustment because it assumed that revenue as NDA.

2.2.3. Model of Dechow et al. (1995) – Modified Jones

To overcome the limitation of the model of Jones (1991), Dechow et al (1995) proposed a modified version as follows:

$$\frac{\mathbf{TAit}}{\mathbf{Ait-1}} = \alpha_0 \frac{1}{\mathbf{Ait-1}} + \alpha_1 \frac{\Delta \mathbf{REVit} - \Delta \mathbf{RECit}}{\mathbf{Ait-1}} + \alpha_2 \frac{\mathbf{PPEit}}{\mathbf{Ait-1}}$$

In which:

$\Delta RECit$ is the change in receivables for company i from year t-1 to t

2.3. Factors affecting earnings management

2.3.1. The number of members in management board

According to the agency theory, the division of interests between managers and shareholders in listed companies is inevitable. Therefore, they have many opportunities to manipulate earnings for a purpose. (Goodstein et al, 1994), Jensen, 1993) and Yermack, 2003).

2.3.2. The duality relationship chairman-director

According to agency theory, the chairman of the board should be an independent person separate from the director because if there is duality, it can easily lead to take advantage of assigned powers to make earnings managements and benefit them (Murhadi, 2009).

2.3.3. Auditor size

According to agency theory, shareholders can use the supervision mechanism through independent audit to protect their interests and avoid earnings management. Krishnan (2003) explains that the audit firms in the Big4 group operate efficiently and with quality because, on the one hand, they have abundant financial resources, a team of professional independent auditors, knowledge well-educated, well-trained, on the other hand, they operate efficiently and with quality to protect their own reputation and brand.

2.3.4. Financial performance

Signaling theory suggests that managers of companies use good signals as a tool to send information to the market about their production and business performance such as ROA. According to Nugroho (2001), ROA has a negative impact on stock prices. Many metrics, such as ROA, ROE, ROS, sales growth, and so on, are used to assess financial results.

2.3.5. Firm size

The larger the firms, the greater the separation between ownership and management of the business, which raises concerns that managers will pursue goals that are attractive to them, but not necessarily beneficial to shareholders and the company. Myers et al. (2007) gave empirical results of proving that a big firm states inaccurate profits Furthermore, a large company has a much higher volume of economic transactions and larger sums than a small firm. That is why when the accounting policies of large companies change, the profits are affected.

2.3.6. Financial leverage

Watts and Zimmerman (1990) suggest that firms with a high debt ratio in their capital structure are more likely to choose accounting policies to adjust earnings growth to eliminate negative effects.

3. Research methodology

3.1. Research model

Hypotheses are tested by utilizing model:

$$|DA_{it}| = \alpha_0 + \alpha_1 BOARD + \alpha_2 DUAL + \alpha_3 AUDIT + \alpha_4 ROA + \alpha_5 SIZE + \alpha_6 LV + \varepsilon$$

Summary of variables in the model are presented in Table 1:

Table 1. Summary of variables in the model

Name of variables	Type of variables	Code	Measurement
Earnings management	Dependent	DA	DA is measured by the model of Jones (1991)
The number of members in management board	Independent	BOARD	The number of people in management board
The duality relationship chairman-director	Independent	DUAL	1 if chair of management board cum a director 0 if chair of management board is not a director
Auditor size	Independent	AUDIT	1 if audited by Big 4 auditors 0 if not audited by Big 4 auditors
Financial performance	Independent	ROA	Profit after tax/ Total assets
Firm size	Independent	SIZE	Natural logarithm of net profit
Financial leverage	Independent	LV	Total liabilities/ Total assets

Source: by the author (2021)

Thus, discretionary accruals should be first measured, the model of Jones (1991), which includes 2 equations, is used as follows:

$$\frac{TAit}{Ait-1} = \alpha_0 \frac{1}{Ait-1} + \alpha_1 \frac{\Delta REVit}{Ait-1} + \alpha_2 \frac{PPEit}{Ait-1} \textbf{ (Equation 1)}$$

From equation 1, coefficients α_0, α_1 and α_2 are obtained to estimate DA (discretionary accrual) by using equation 2 as follows:

$$|DA_{it}|A_{it} = \frac{TAit}{Ait-1} - \alpha_0 \frac{1}{Ait-1} + \alpha_1 \frac{\Delta REVit}{Ait-1} + \alpha_2 \frac{PPEit}{Ait-1} + \varepsilon \textbf{ (Equation 2)}$$

In which:

$|DAit|$ is the absolute discretionary accrual of firm i for year t

3.2. Research hypothesis

In order to investigate the effect of factors on earnings management in the case of listed firm in Vietnam, six hypotheses are proposed.

H1*:* The number of members in management board has a negative relationship with earnings management.

Agency theory suggests that, in addition to the salary and bonus mechanism for managers, another mechanism to protect the interests of shareholders is through the board of management. According to research by Persons (2006), the size of the management board has a negative relationship with earnings management.

H2*:* The duality relationship chairman-director has a positive relationship with earnings management.

In case, one person holds both a chair of management board and a director, this makes the conflicts of interests. Mulgrew and Forker (2006) found that if chair of management board also is a director, there is a high possibility to have earnings management.

H3*:* Auditor size has a negative relationship with earnings management.

Kinney and Martin (1994) reviewed nine related studies and concluded that there was a positive relationship between audit activities and net profits and assets of an auditee. Audit quality is evaluated basing on the auditor size of big 4 and non-big 4 and there is existence of relationship with auditor size and earnings management.

H4*:* Financial performance has a positive relationship with earnings management

For making economic decisions, investors base on the financial statements disclosed in the stock exchange such as stock price, audited financial statements and others. Charfeddine et al. (2003) found that in case of poor financial performance, stock prices and firm values reduce. That is why earnings management is arisen for keeping good reputation in the eyes of stakeholders.

H5: *Firm size has a positive relationship with earnings management*

Barto and Simko (2002) found that a large firm faces many pressures on overstating financial performance in order to have good images from analysts. Because of getting expected profits, this makes listed firms have earnings management for deceiving investors.

H6: *Financial leverage has a positive relationship with earnings management*

According to signaling theory, Watts and Zimmerman (1990) suggest that the choice of corporate financing can send signals to outside investors about corporate governance information. Therefore, it is possible that the company's managers have the goal of increasing profits to meet the wishes of creditors or reduce risks for the next loan agreement.

3.3. Data collection and analysis method

The process of data collection is done as follows: First, select companies listed on the Ho Chi Minh Stock Exchange that have all the required published data to measure earnings management behavior. Second, to measure the factors affecting earnings management in the research model, data collection relies on annual reports, financial statements, management reports, and information extracted from Fiinpro platform. To analyze the quantitative data, this study applies descriptive and statistical summary of independent and dependent variables to find the average value, the largest value and the smallest of each study variable and the range of variance between those values. Next, correlation matrix is used to detect the relationships in each pair of research variables, focusing on the relationship between DA and each remaining research variable. Finally, OLS regression models were implemented by using Eviews 7.0 software to find the impact of factors on the DA.

4. Research results and discussion

4.1. Descriptive statistics

The results of the descriptive statistics in Table 4.1 show that in Vietnam: The average number of management board members in Vietnam is about 7.22 persons. With a scale of 1 when the chairman is also director/general director and vice versa is a scale of 0, the number of companies with a chairman cum director is 36%. The average number of listed manufacturing companies on HOSE audited by Big4 is about 24% of the companies. The average ratio of return on total assets of Vietnamese companies is 0.07, the lowest is -0.47 and the highest is 0.42. The average profit of Vietnamese companies is 4.8, the lowest is -2.44 and the highest is 120.9. The average ratio of total debt to total assets of Vietnamese companies is 0.47, the lowest is 0.00 and the highest is 1.29.

Table 2. Descriptive statistics for variables included in the model

	DA	BOARD	DUAL	AUDIT	ROA	SIZE	LV
Mean	0.02	7.22	0.36	0.24	0.07	0.48	0.47
Median	0.00	7.00	0.00	0.00	0.05	0.09	0.49
Maximum	3.36	13.00	1.00	1.00	0.42	12.09	1.29
Minimum	-1.96	3.00	0.00	0.00	-0.47	-2.44	0.00
Std. Dev.	0.31	2.55	0.48	0.43	0.08	1.59	0.20
Skewness	3.72	0.15	0.60	1.19	-0.06	5.01	-0.16
Kurtosis	49.45	2.37	1.36	2.41	11.44	30.08	2.89
Jarque-Bera	40656.57	9.02	75.90	109.91	1309.90	15318.77	2.15
Probability	0	0	0	0	0	0	0
Sum	8.25	3185.00	157.00	108.00	29.38	210.73	205.61
Sum Sq. Dev.	42.48	2868.22	101.11	81.55	2.70	1116.63	17.63
Obs	441	441	441	441	441	441	441

Source: Eviews 7.0

4.2. Correlation matrix

The correlation analysis of variables presented in Table 4.2 shows the coefficients with appropriate correlation between variables. Moreover, most correlation coefficients between the independent variables are less than 0.8, indicating no collinearity in the model.

Table 3. Correlation matrix for variables included in the model

Correlation							
Probability	**DA**	**BOARD**	**DUAL**	**AUDIT**	**ROA**	**SIZE**	**LV**
DA	1						

BOARD	-0.4760	1					
	0	-----					
DUAL	0.2586	-0.2862	1				
	0	0	-----				
AUDIT	-0.3339	0.3641	-0.3353	1			
	0	0	0	-----			
ROA	0.0507	-0.0943	0.0515	0.1071	1		
	0.2878	0.0477	0.2803	0.0245	-----		
SIZE	-0.0122	0.0265	0.0746	-0.1395	0.3146	1	
	0.7991	0.5785	0.1179	0.0033	0	-----	
LV	0.1176	-0.0336	0.0974	-0.0884	-0.4022	-0.1109	1
	0.0135	0.4811	0.0409	0.0636	0	0.0198	----

Source: Eviews 7.0

4.3. Regression results

Performing analysis of equation 1 according to OLS, the results obtained from Table 4.3 show that Adj R-squared = 0.2278, which means that 22.78% of the variation of the $\frac{\text{TAit}}{\text{Ait}-1}$ variable is explained by the independent variables. It could be seen that the level of explanation of the equation 1 is not very high but remains acceptable (Prob > F = 0.0000).

Table 4. Regression results of the equation 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.017421	0.009762	1.784558	0.075
1/A_IT_1	0.012564	0.003703	3.392852	0.0008
REV/A_IT_1	0.114723	0.011331	10.12507	0
PPE/A_IT_1	-0.05633	0.012104	-4.65356	0
R-squared	0.233035	Mean dependent var		0.01951
Adjusted R-squared	0.22777	S.D. dependent var		0.133353
S.E. of regression	0.117186	Akaike info criterion		-1.44108
Sum squared resid	6.001131	Schwarz criterion		-1.40399
Log likelihood	321.758	Hannan-Quinn criter.		-1.42645
F-statistic	44.25952	Durbin-Watson stat		1.777304
Prob(F-statistic)	0			

Source: Eviews 7.0

The full estimated equation 1 is:

$$\frac{\mathbf{TAit}}{\mathbf{Ait-1}} = \mathbf{0.0125} * \frac{\mathbf{1}}{\mathbf{Ait-1}} + \mathbf{0.1147} * \frac{\mathbf{\Delta REVit}}{\mathbf{Ait-1}} - \mathbf{0.0563} * \frac{\mathbf{PPEit}}{\mathbf{Ait-1}} + \mathbf{0.0174}$$

Using results from equation 1, DA is estimated by equation 2:

$$|\boldsymbol{DA}_{\mathbf{it}}|\mathbf{A_{it}} = \frac{\mathbf{TAit}}{\mathbf{Ait-1}} - \mathbf{0.0125} * \frac{\mathbf{1}}{\mathbf{Ait-1}} - \mathbf{0.1147} * \frac{\mathbf{\Delta REVit}}{\mathbf{Ait-1}} + \mathbf{0.0563} * \frac{\mathbf{PPEit}}{\mathbf{Ait-1}}$$

The DA variable is used as the dependent variable to study the factors affecting the earnings management. The research model is as follows:

$$|\boldsymbol{DA}_{\mathbf{it}}| = \boldsymbol{\alpha}_0 + \boldsymbol{\alpha}_1\mathbf{BOARD} + \boldsymbol{\alpha}_2\mathbf{DUAL} + \boldsymbol{\alpha}_3\mathbf{AUDIT} + \boldsymbol{\alpha}_4\mathbf{ROA} + \boldsymbol{\alpha}_5\mathbf{SIZE} + \boldsymbol{\alpha}_6\mathbf{LV} + \boldsymbol{\varepsilon}$$

Proceed to run OLS regression, results show statistical significance level F of the model = 0.000 is less than 0.1, inferring the model is statistically significant. Besides, the adjusted R^2 had a value of 24.3%, which means the independent variables explained 24.3% of the variation of the dependent variable. The Durbin-Watson coefficient = 1.2599 is in the range from 1 to 3, so it can be concluded that there is no autocorrelation between the variables in the model and the model is appropriate.

Table 5. Regression results of the model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.24784	0.059214	4.185526	0
BOARD	-0.04147	0.005327	-7.78392	0.0001
DUAL	0.054184	0.029329	1.847433	0.0654
AUDIT	-0.12696	0.03352	-3.78754	0.0002
ROA	0.156147	0.190553	0.81944	0.413
SIZE	-0.00614	0.008649	-0.7099	0.4781
LV	0.165642	0.071348	2.321617	0.0207
R-squared	0.253458	Mean dependent var		0.018718
Adjusted R-squared	0.243138	S.D. dependent var		0.310712
S.E. of regression	0.270313	Akaike info criterion		0.237273
Sum squared resid	31.71197	Schwarz criterion		0.302178
Log likelihood	-45.3186	Hannan-Quinn criter.		0.262875
F-statistic	24.55789	Durbin-Watson stat		1.259918
Prob (F-statistic)	0			

Source: Eviews 7.0

(1) The number of members in management board

Table 4.4 also shows that the BOARD variable and the DA variable are negatively correlated (coefficient of the BOARD variable = -0.041). Hypothesis H1 is accepted (prob.=0.0001<0.1). This result is consistent with agency theory and research results in the US (Persons, 2006); research in Australia (Xingzheng, 2011); developing countries such as Jordan stock exchange (Suzan et.al, 2012), Nigeria (Egbunike, 2015) and Vietnam (Samy et. al., 2016).

(2) The duality relationship chairman-director

The results of Table 4.5 show that these two variables have a positive relationship with each other (coefficient of DUAL variable = 0.054) and the relationship is statistically significant (prob.=0.0654<0.1). In other words, hypothesis H2 is accepted. This result is consistent with the study in the Malaysian stock market (Abdul Rahman, 2006) and the study in the Jordan market (Suzan Abed et al., 2012).

(3) Auditor size

As Table 4.4 shows, it seems that companies that are Big4 audit clients have lower adjusted earnings than others. In other words, the auditor size variable (AUDIT) has a negative relationship with the variable DA and this relationship is statistically significant (prob.=0.0002<0.1). Therefore, hypothesis H5 is accepted. This research result is consistent with research results of some developing countries such as: Malaysia (Johl et al., 2007) and Indonesia (Rifki Zulkarnain, 2014).

(4) Financial performance

The research results show that there is a positive correlation between the financial performance (ROA variable) and earnings management (DA variable), shown in the regression coefficient of 0.156 shown in Table 4.4. However, this relationship is not statistically significant (prob.=0.413>0.1). In other words, hypothesis H4 is not accepted. This result is similar to the study in Iran (Seyed, 2015); and in Vietnam (Samy Essa, 2016).

(5) Firm size

As Table 4.4 shows, it seems that companies that the SIZE variable has a negative relationship with the variable DA, but this relationship is not statistically significant (prob.=0.4781>0.1). Hypothesis H5 is not accepted. This research result is consistent with research results in Nigeria (Egbunike, 2015) and Iran (Farzaneh, 2006).

(6) Financial leverage

With the research results shown in Table 4.4, the evidence supports the hypothesis that the larger the financial leverage, the larger the earnings management of the enterprise (due to the regression coefficient associated with the variable LV=0.1656). and (prob.=0.0207<0.1). This also means that hypothesis H6 is accepted. The above results can be explained by countries around the world such as Othman (2006), Moieira (2007) and Prevost (2008).

5. Conclusions and recommendations

5.1. Conclusions

This study studies on the factors affecting earnings management in the case of listed firms in Vietnam. Literature review was based on four fundamental theories which are agency theory, information asymmetry theory, signaling theory and political cost theory. Accordingly, by using a panel data including 147 selected manufacturing listed firms in Vietnam, the research results show that, (i) there exists a phenomenon of earnings management in companies listed on Vietnam's stock market; (ii) the duality relationship chairman-director and the financial leverage is proportional to the phenomenon of earnings management; (iii) the smaller the size of the board of directors and the independent auditors, the more earnings management will be; (iv) financial performance and firm size have no effect on earnings management phenomenon.

5.2. Recommendations

5.2.1. Recommendations for stakeholders

Investors should also carefully review and maintain a skeptical attitude towards stock symbol that disclose information, especially financial statements, late. The Accounting Law stipulates the maximum time limit for submitting financial statements is 90 days from the end of the financial year. The question is, "What do companies do during that 90-day period that makes them file late financial statements?" It is worth bearing in mind whether there is ambiguity and confusion in the preparation and presentation of financial statements or not. Moreover, investors in general and domestic investors in specific should aim for "clean investment and clean profit" according to the standardized principles measured by the ESG index of the legal framework issued by the United Nation, as this is the principle of responsible and sustainable investment.

5.2.2. Recommendations for listed firms in Vietnam

Enterprises should approach corporate governance from the "bottom-up," that is, they should manage their operations effectively by focusing on the company's actual specific activities. The executive board listens to, shares, and synthesizes the opinions of all individuals and groups within the unit.

5.2.3. Recommendations for audit firm

In order to improve audit quality, audit firms must prioritize resource and workforce development. Comprehensive education and training programs must be developed that emphasize the importance of current audit knowledge, study cases, and technology. Career paths must be carefully planned in order to demonstrate the company's affection, trust, and care for each employee – which will increase employee loyalty and effectiveness. Additionally, in addition to enhancing audit quality through increased resources and workforce, audit firms in Vietnam may place a greater emphasis on developing quality control systems, audit procedures, and risk assessment processes. Moreover, audit firm should also make effort to encourage employee to join the Vietnam Association of Certified Public Accountants (VACPA) as the association requires research and comprehensive guidelines to assist auditors in making sound professional judgments and conducting effective audits.

5.3. Implications to State agency

Vietnam scored 54 points on the World Bank's Business Environment 2020 report's index of minority investor protection. This index is slightly higher than the Asia-Pacific region's average (53.4 points). Additionally, due to Vietnam's lack of information transparency, stock prices in general and individual stocks in specific do not accurately reflect previously published information. As a result, the competent state agency should develop a roadmap for the passage of the "Investor Protection Law"; once the law is clear and specific sanctions are in place, the board of directors' compliance will be evaluated. As a result, it contributes to the reduction of earnings management behavior.

References

Aljifri, K (2007), "Measurement and Motivations of Earnings management: A Critical Perspective", *Journal of Accounting - Business & Management*, Vol. 14, 75 - 95.

Bartov, E (1993), "The timing of asset sales and earnings manipulation", *The Accounting Review*, Vol. 68, No. 4, pp. 40 - 55.

Bartov, E., D. GiVol.y & Hayn, C. (2002), "The rewards to meeting or beating earnings expectations", *Journal of Accounting and Economics*, Vol. 33, No 2, pp. 173 - 204.

Baker, T., D. Collins & Reitenga, A. (2003), "Stock-option compensation and earnings management incentives", *Journal of Accounting, Auditing and Finance*, Vol 8, pp. 557 - 582.

Becker, C. M. Defond J. Jiambalvo & Subramanyam, K. (1998), "The effect of audit quality on earnings management", *Contemporary Accounting Research*, Vol. 15, pp. 1 - 24.

Dalton, D. R., Daily, C. M., Ellstrand, A. & Johnson, J. (1998), "Board composition, leadership structure, and financial performance: meta-analytic reviews and research agenda", *Strategic Management Journal*, Vol. 19, pp. 69 – 90.

Davidson, R. Goodwin-Steward, J. & Kent, P. (2005), "Internal governance structures and earnings management", *Accounting and Finance*, Vol. 45, pp. 241 - 267.

DeAngelo, L.E. (1986), "Accounting Numbers as Market Valuation Substitutes: A Study of Management Buyouts of Public Stockholders", *The Accounting Review*, Vol. 61, No. 3, pp. 400 - 420.

Egbunike, A.P., Paulinus, E.C. & Nympha, A.N. (2015), "The Influence of Corporate Governance on Earnings Management Practices: A Study of Some Selected Quoted Companies in Nigeria", *American Journal of Economics, Finance and Management*, Vol. 1, No.5, pp. 482 - 493.

Erickson, M., M. Hanlon & Maydew, E. L. (2006), "Is there a link between executive equity incentives and accounting fraud?", *Journal of Accounting Research*, Vol. 44, pp. 113 - 144.

Goodstein, J., Gautam, K. & Boeker, W (1994), "The Effect of Board Size and Diversity on Strategic Change", *Strategic Management Journal*, Vol. 15, pp. 241 - 250.

Giap, T. L. (2014), *Relationship of corporate governance and earnings management of listed firms on Ho Chi Minh Stock Exchange*, Master study, Ho Chi Minh University of Economics.

Guidry, Leone & Rock (1999), "Earnings-based bonus plans and earnings management by business-unit managers", *Journal of Accounting and Economics*, Vol. 26, pp. 113 – 142.

Healy P.M. (1985), "The Effect of Bonus Schemes on Accounting Decisions", *Journal of Accounting and Economics*, Vol. 7, pp. 85 - 107.

Healy, P & Wahlen, J. (1999), "A review of the earnings management literature and its implications for standard setting", *Accounting Horizons*, Vol 13, pp. 365 - 383.

Iatridis, G. & Kadorinis, G. (2009), "Earnings management and firm financial motives: A financial investigation of UK listed firms", *International Review of Financial Analysis*, Vol. 18, No.4, pp. 164 - 173.

Jensen, M.C. & Meckling (1976), "Theory of Firm: Managerial Behaviour, Agency Costs and Ownership Structure", *Journal of Financial Economics*, Vol. 3, pp. 305 - 350.

Johnson, D. (1998), *Applied Multivariate Methods for Data Analysis*, Duxbury Press, Pacific Grove, pp. 407.

Johl, S., Jubb, C. & Houghton, K. (2007), "Earnings management and the audit opinion: evidence from Malaysia", *Managerial Accounting Journal*, Vol. 22, No. 7, pp. 688 - 715.

Kothari, S.P., Lcone, A.J. & Wasley, C.E. (2005), "Performance-Matched Discretionary Accruals", *Journal of Accounting and Economics*, Vol. 39, pp. 163 - 197.

Krishnan, G.V. (2003), "Does big 4 auditor industry expertise constrain earnings management", Accounting Horizons, Vol. 17, pp. 1 - 16.

Moeira, J. A. & Pope, P. F (2007), "Earnings management to avoid losses: a cost of debt explanation", *Lancaster University*, Working paper.

Nelson, M. W., J, A. Elliott & R. L. Tarpley (2002), "Evidence from Auditors about Managers" and Auditors" Earnings Management Decisions", *The Accounting Review*, Vol. 77 (Sulement), pp. 175 - 202.

Dang, N.H. (2017), "Factors Affecting Earnings Management: The Case of Listed Firms in Vietnam", *International Journal of Economic Research*, Vol. 14, No. 20, pp. 117 – 134.

Nguyen, T.P. (2014), *Relationship between financial statement disclosure and earnings management of listed firms in Vietnam*, Master study, Ho Chi Minh University of Economics.

Persons, O.S. (2006), "Corporate Governance and Non-Financial Reporting Fraud*", The Journal of Business and Economic Studies,* Vol. 12, No. 1, pp. 27 - 40.

Prevost, A. K., Skousen, C. J. & Rao, R. P. (2008), "Earnings Management and the Cost of Debt", *Ohio State University, Department of Finance, Stillwater*, Working paper.

Pincus, M. & Rajgopal, S. (2002), "The interaction of accrual management and hedging: Evidence from oil and gas firms", *The Accounting Review*, Vol. 71, pp. 127 - 160.

Pham, T.B.V. (2017), "Earnings management before and after the issuance of shares on the Vietnam stock market", *Journal of Economic Science*, No. 01, pp. 98 - 110.

Roychowdhury, S. (2006), "Earnings Management through Real Activities Manipulation, Market Performance", *Journal of Accounting and Economics*, Vol. 42, pp. 335 - 370.

Zulkarnain, R. & Kusuma, I.W. (2014), *The effect of leverage, firm size, independent commissioner and reputation on earnings management: Empirical Study on Manufacturing Companies Listed in the Indonesian Stock Exchange 2010-2012*.

Essa, S., Kabir, R. & Nguyen, H.T. (2016), *Does corporate governance affect earnings management? Evidence from Vietnam*, University of Twente The Netherlands.

Abed, S., Al-Attar, A. & Mishiel, S.D. (2012), "Corporate Governance and Earnings Management: Jordanian Evidence*", International Business Research*, Vol. 5, No. 1, pp. 216 - 115.

Subramanyam, K (1996), "The Pricing of Discretionary Accruals", *Journal of Accounting and Economics*, pp. 249 - 281.

Tran, T. M. T. (2014), *Factors affecting earnings management of listed firms on Ho Chi Minh Stock Exchange*, Master study, Ho Chi Minh University of Economics.

Watts, R. L & Zimmerman, J. L (1990), "Positive Accounting Theory: A Ten-Year Perspective", *Accounting Review*, Vol. 65, No. 1, pp. 131 - 156.

Zahra, S. & Pearce, J (1989), "Boards of Directors and Corporate Financial Performance: A Review and Integrative Model*", Journal of Management*, Vol. 15, pp. 291 - 334.