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EARNINGS MANAGEMENT OF LISTED COMPANIES ON VIETNAM STOCK MARKET: AN EMPIRICAL STUDY AND IDENTIFICATION OF INFLUENCING FACTORS

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Based on data from 1,281 observations on Vietnam's stock market in the period 2009-2015, the article clarifies two fundamental issues: (i) identifying the existence of earnings management of listed companies and (ii) analyzing the factors influencing earnings management behavior such as business sectors, auditing firms, and debt-to-equity ratio. The findings of the article contributed to the limited research on earnings management on Vietnam's stock market in particular as well as on the disclosure of earnings information of Vietnam's enterprises in general.

Key words: *earnings management, stock market, listed companies*

1. Introduction

Accounting information in general, profit information in particular plays a central role that reflects the success or failure of a business. However, accounting standards allow managers to choose the appropriate accounting policies and accounting estimates for their enterprises. As a result, managers can through the accounting flexibility or through real actions alter earnings in favor of themselves or their shareholders. Users usually evaluate a business as good or bad, which means profit or loss through the information presented in the income statement. Therefore, managers tend to use flexible accounting techniques to create a financial report that distorts the image of the company's operations and its financial position. This behavior is called earnings management (Healy & Wahlen, 1999).

Earnings management has become well known during the last decade when a number of accounting scandals were discovered. Among them there was a scandal of Enron, the seventh-largest US company, reporting revenues up to 100 billion USD a year before it was forced to bankrupt in 2001. Enron was later jailed by numerous individuals involved in fraudulent accounting data. In Vietnam, although there are no official statistics, in the recent time, the deviation of profit before and after the audit reported by listed companies on the stock market (e.g. VCG, PPC ...) is increasing. Some companies had to be delisted due to fraudulent accounting data in general, profit figures in particular (e.g. BBT, DVD ...).

According to Jones (2011), accounting discrepancies and frauds frequently occur in the history of accounting development in each country, but earnings management through flexible accounting policies is dominant. Companies have numerous reasons for altering earnings, including: generating a uniform performance over the years, maximizing performance, or

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trying to minimize performance results to avoid income tax (Bhattacharya et al., 2003).

Studies on earnings management have shown that there are many different aspects between listed and non-listed (or private) companies, even the results are contrary. Factors that have been studied include: incentives for managers to sign contracts, ownership structures, tax incentives, debt/equity ratios, wage/bonus system, influence of independent audit, business sectors, and profitability (Healy, 1985; Watts & Zimmerman, 1986; Tendeloo & Vanstraelen, 2008; Healy & Whalen, 1999).

According to Michell et al. (1997), compared to private and/or non-listed companies, listed companies have more reasons to manipulate earnings figures. The main reason is to reduce the conflict of interest between shareholders and banks with managers. The adjustment of earnings figures is also supposed to convince the users of financial statements on the stability of business operations, profitability ... thus increasing the liquidity of the company's stock.

Studies on earnings management are controversial. In this regard, studies in Vietnam are rather limited, as the boundaries between profit adjustment (legal one) and accounting fraud (illegal one) are often quite fragile. Several studies on this subject have just come up with quantification of earnings adjustment based on the application of some models of scholars in the world under specific conditions of Vietnam, for example Jones model (1991) and Jones revised-model (Dechow, 1995) (Pham Thi Bich Van, 2013; Nguyen Tren Nguyen Tren, 2014; Hoang Khanh & Tran Thi Thu Hien, 2015). Up to now, according to our knowledge, there have been no studies on the existence of earnings management behavior as well as on the influence of factors on earnings management of listed companies on the stock market of Vietnam. Thus, this paper will focus on the research gap by identifying and analyzing the factors affecting the adjustment of earnings figures of listed companies on the stock market of Vietnam.

Two research questions were asked:

- Does the earnings management exist among listed companies on the stock market of Vietnam?

- Do factors such as business sectors, debt/equity ratio, and independent audit affect the earnings management of listed companies in Vietnam?

In which, the first question is the main question of the research to examine whether there exists in practice the earnings management of listed companies in Vietnam. If the empirical results show the existence of earnings management, the study will continue to answer the second question to assess the factors that affect this behavior of enterprises.

The paper is structured as follows; the next section will systematize the theory, relevant studies and the research hypothesis. Research methods and data processing methods will be presented in Section 3. Section 4 will analyze the results to answer the research questions. The final part is the conclusion, limitations and suggestions for the future research.

2. Underlying theories, related studies and research hypotheses

The term earnings management is widely used by researchers in many respects and for different purposes. The definition of earnings management developed by Healy & Whalen (1999) is the most commonly used. Accordingly, earnings management as managers use estimates and judgments in preparing financial statements and/or in setting business transactions to alter financial statements, making the user misunderstood about the results of the company's operation, which influences their making decisions based on the information (already be adjusted) provided by the accountant.

There exists a delicate boundary between the choice of a suitable and legal accounting policy and fraudulent misconduct (Dechow & Sknner, 2000). Firms are more likely to choose to report stable annual growth rates rather than fluctuation in profitability as a result of changes in the market, which is called stabilization or profit smoothing. Managers therefore use flexible accounting policies to create a stable return on their earnings by cutting back on high profits and reporting a reasonable profit margin through flexible accounting techniques for profit (or revenue) transfer between reporting periods; or they can take unrealized

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profits in the coming year to offset the loss in the reporting year for the purpose of achieving a positive result (Jones, 2001). The current accounting standards have a lot of content that allows managers to use flexible accounting, for example: capitalization or non-capitalization of research and development costs, determining the useful life of fixed asset, selecting the depreciation methods, allocating the prepaid expenses or determining the provisions, changing the valuation method of inventories… If applying a flexible accounting policy is always considered as legal, then beyond that limit is fraud. The difference between earnings management activities and fraudulent behavior is that the latter is an illegal activity as violating prescribed framework while the former is related to the application of flexible accounting policies within the framework of norms, laws and regulations. In fact, it is difficult to distinguish between fraud and flexible accounting and boundaries of these two concepts are difficult to delineate. Vietnamese Auditing Standards 240 (VSA 240) guided the auditors to identify frauds in the financial statements in paragraphs A3 and A4. Compared with the concept of earnings management, it can be seen that earnings management is not a fraudulent activity because managers do not directly interfere with accounting data as fraudulent behavior. The application of flexible accounting policies for specific purposes and in accordance with the specific circumstances of enterprises within the framework of norms and laws is the difference of earnings management compared with fraud.

2.1. Underlying theories

Threshold theory

Degeorge et al. (1999) describe the behavioral thresholds for earnings management and suggest a model that explains the different thresholds that lead to different ways of earnings management. The theory suggests that earnings adjustment is one of the following fundamental thresholds: (i) creating stability in performance; (ii) ensuring the expectations of analysts; and (iii) reporting a positive result and also a positive image of the company. And statementing a positive result is the main reason. Hayn (1995) argues that companies adjust their profits to "cross the red line" to place themselves not low, but not too far away from the zero point (unprofitable). Limitations are often outlined by managers as having passed the negative threshold, so that zero point or just passing zero points are the threshold or "red line" for many executives. Thus, threshold theory is used as a basis for explaining why companies are considered by researchers to be earnings management if the result goes beyond the negative range and the net rate of return fluctuates around the threshold 0-5% for a long time.

Prospect theory

Kahneman & Tversky's (1979) prospect theory can be used to explain earnings management. According to the theory, companies often attract investors' attention when they move from loss (negative) to positive (positive) result and when they maintain a stable return. Prospect theory is associated with behavioral finance, where the fear of losing is always dominant among investors, so the chances of investing in a company are more appreciated for a steady return rather than a high return but erratic. Therefore, to attract investors and shareholders, managers often find ways to meet their expectations as well as reduce fear of failure by announcing a positive annual return at a stable level (threshold - not too high or too low).

2.2. Related studies and research hypothesis development

Studies on earnings management have evolved since the 1960s associated with a focus on capital markets. At the earliest stages, the initial studies usually examine the market reaction by evaluating the correlations between profit, volume, and stock price. Studies at this time suggest that investors may have been misinformed when the only source of information they relied on was financial statements. However, when Wats & Zimmernam (1986) developed the theory of positive accounting, the research shifted the focus from capital markets to internal company motives, involving managers. Positive accounting focuses on explaining and predicting the behavior of managers in adjusting returns to increase earnings, improving credibility and image, attracting the attention of investors,

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easy to get loans, and relationships with government agencies.

There are several methods used to identify and measure the existence of earnings management. McNichols (2000) argues that there are three methods commonly used in academic research: (i) based on the distribution of profit, (ii) on the analysis of total accrual accounting, and (iii) based on analysis of specific accrual accounting components. In particular, the model that relies on the probability distribution of profits indicates whether there exists earnings management behavior and how it is used. The two remaining methods are based on the differences between accrual accounting and cash accounting to quantify earnings management as well as showing how earnings are adjusted through accrual accounting (Jones, 1991; Dechow, 1995...).

However, when commenting on the above methods, Gerakos (2012) evaluates that the models based on the accrual accounting analysis yields not really relevant and reliable results because they are based on many assumptions. Gerakos (2012) argues that the research on earnings management behavior should be based on a time series rather than random selections as proposed by many authors. According to Gerakos (2012), earnings adjustments affect on many accounting periods, not limited to one fiscal year, so the probability distribution model of profits as proposed by Burgastahler and Dichev (1997), Degeorge et al. (1999) would be more appropriate. According to the prospect theory, profit is viewed as a measure of the efficiency of a business. Users do not have any information other than financial information on the financial statements, so they only have to rely on these reports to assess the company's financial status. According to the theory of expectations, due to the fear of losses, users often focus on profit targets, which in turn motivate managers to adjust returns to the appropriate level that is sufficient with a profit not too high, or a stable (moderate) return over the years. Compared to the method based on accrual accounting analysis, the method relied on the distribution of profits over the years is more advantageous as it provides a more comprehensive view on earnings management over time. One of the other advantages of this approach is that it avoids the problems associated with econometric data processing in the analysis and calculation of accruals accounting (Burgstahler & Dichev, 1997).

One of the studies using the profit distribution method was the study by Ball and Shivakumar (2005) in the UK. Findings suggest that private companies in the UK adjust for more often than publicly held companies. However, the study by Beatty et al. (2002) in the banking sector shows that listed banks tend to adjust their profit than non-listed ones. The authors also found that the field of activity also partly affected the trend of earnings adjustment.

In the study of the relationship between earnings management and audit quality, Tendeloo and Vanstraelen (2008) find that earnings management behavior is a reality in European countries. Earnings management correlated with independent auditors and companies often adjust their earnings to surpass the loss status, and most of them are audited by non-Big 4; the authors also found a correlation between earnings management and debt to equity ratio.

Hayn (1995) examined 65,466 profit distributions observed from US companies. The findings are as follows: companies often have profit distributions around point 0, especially the majority focuses on the right of score 0 (positive result). The analysis also shows that companies with profit below zero tend to adjust returns around or greater than zero at a moderate level. The results show that about 30-40% of companies tend to adjust profit from negative to positive to overcome the red line in the business results.

Thus, in this study the first hypothesis was developed to answer the first research question:

H1: Listed companies on the stock market of Vietnam adjust their earnings to avoid reporting losses (negative results).

2.3. Factors affecting earnings management

2.3.1. Business sectors

Previous studies have argued that industry characteristics have a significant impact on earnings management. The research by Healy and Whalen (1999)

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shows that earnings management positively correlated with firms operating in industries with multiple constraints. Research results from Healy & Whalen (1999) also agree with Collins et al. (1995) findings when examining banking sectors that are more constrained than other industries. More than half of the banks in the sample showed signs of earnings management as the limitations on monetary trading were intensified.

A further study conducted by Sun & Rath (2009) focused on manufacturing industries. The study was based on 4,844 observations from data collected by companies over six years in Australia. The authors found evidence indicating that enterprises in the supporting industries, small and medium enterprises facing high competition with low profit tend to adjust the profit upwards. The study also showed that enterprises with less structural change, often facing the uncertainty in business, tend to adjust profits higher than other companies.

The results from the above studies provide evidence that earnings management are often associated with certain industries. Therefore, the following research hypothesis is proposed.

H2: Business sectors affect earnings management of listed companies on the stock market of Vietnam

2.3.2. Debt ratio

Watts and Zimmerman (1986) argue that firms with high debt ratios tend to report higher revenues or profits. Managers adjust their earnings when the debt ratio is high in order to reduce the risk perceived by shareholders or creditors. By adjusting profit or revenue, businesses can avoid high capital costs due to the increase in interest rates from lenders; or easier to mobilize capital from the market. Deegan (2009) also argues that managers tend to adjust profits in the direction of increasing liquidity as well as ease in obtaining loans at appropriate interest rates. So, as debt ratios go up, managers often have more incentive to manipulate earnings by using flexible accounting techniques.

Although most studies have argued that high debt ratio is positively correlated with earnings management, there are also studies having different results. Defon (1994) argues that firms with high debt ratios often have to meet the requirements imposed by lenders, so managers and companies are more subject to supervision from creditors, thus reducing the ability to adjust profit.

From the above analysis, the following hypothesis is proposed.

H3: The debt to equity ratio affects earnings management of listed companies on the stock market of Vietnam.

2.3.3. Independent audit

Independent audit is often mentioned in studies on earnings management because the purpose and mission of independent audit is to prevent and reduce the use of accounting techniques to distort financial statements. As auditing plays an important role, so many previous researches have suggested that there is a relationship between independent auditing and earnings management. However, the results are very different. The study by Bauwhele et al. (2003) argues that there is no relationship between audits by Big 4 and earnings management behavior. Other studies suggest that audits by the Big 4 will reduce earnings management compared to audits by non-Big 4 (Tendeloo & Vanstraelen, 2008; DeAngelo, 1981; Becker et al., 1998). With the research context in Vietnam, the following hypothesis was developed:

H4: Independent audit has different effects on earnings management of listed companies on the stock market of Vietnam.

3. Research method and data processing

The quantitative method was chosen to study earnings management behavior by examining the profit distributions of listed firms over time series. The secondary data is the financial information on the annual reports of companies listed on the Hanoi Stock Exchange (HNX) and Ho Chi Minh Stock Exchange (HOSE) in 7 years (2009 - 2015) through their websites and cophieu68.vn. Due to constraints of time and budget, only 206 listed companies were randomly selected, accounting for 32% of the total listed companies on both HNX and HOSE as on December 31st, 2015. However, during the data collection process, 23 lcompanies were eliminated due to insufficient data for

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7 years. As a result, 183 listed companies, corresponding to 1,281 observations, were included in the data processing by SPSS software.

The variables of the research model are as follows:

- Dependent variable: Net return on sales. In principle, the dependent variable is the net profit after tax, however, because companies differ in size, so as suggested by Burgstahler & Dichev (1997), the net return on sales will be used in order to eliminate differences in scale.

- Independence variables: Business sectors: All observations are categorized by sectors based on the classification of listed companies according to the criteria of the State Securities Commission website cophieu68.vn. However, to ensure the concentration of data, some adjustments have been made, for example: energy with oil & gas; trade, service with education; construction with real estate ... Finally, 14 business sectors are included in statistical analysis.

Debt ratio: In this study, the debt ratio is determined by the ratio of total liabilities to equity.

Audit firm: to examine whether auditing firm affects earnings management of listed companies in Vietnam. Based on previous studies (Tendeloo & Vanstraelen, 2008; DeAngelo, 1981; Becker et al., 1998) audit firms are also divided into Big 4 and non-Big 4.

The table below summarizes and explains the variables of the research model.

To test the hypothesis, the data processing process comprises two stages. Stage 1 will be based on descriptive statistics to examine the probability distribution of profit of 183 listed companies corresponding to 1,281 observations.

To identify whether a listed firm has adjusted its earnings, the study uses the criteria proposed by previous studies and has been validated by empirical research (Burgstahler & Dichev, 1997; Degeorge et al., 1999). Accordingly, the profit distribution of firms with adjusted behavior will not follow the normal distribution that deviates above zero; fluctuate in the range of 0-5%. However, in the emerging stock markets, profitability may be higher and more fluctuated, so in this study the adjusted threshold was widened between 0 and 7%. Thus, in order to be able to perform further analyzes to test hypotheses about the effect of factors on the earnings management behavior of listed companies in Vietnam, the earnings management variable (Y) is further coded as binary dependent variables as follows:

Firms with a net profit raito between 0 and 7% are assumed to adjust profit and received a value of 1.

Firms with a net profit ratio outside the range of 0 - 7%, i.e. net profit ratios reported <0% and/or> 7%, are assumed not to adjust profit and received a value of 0.

Data processing

The study will perform two steps of data processing, in which:

Table 1: *Variables and explanatory variables*

Variables and coding	Formular	Measure	Classification
Net profit ratio (AVProfit)	Profit after tax/Net sales		Continuous variable
Earnings management (Y)	Net profit ratio	1 when net profit ratio in the range of 0 - 7%; otherwise 0	Binary variable, dependent variable (Y)
Business sector/Industry (X1)	Based on the SSC classification with adjustments	by sequential number, starting at 1, 2, … n	Independent and continuous variable (X1)
Debt ratio (X2)	Total liability/Equity		Independent continuous variable (X2)
Audit firm (X3)		1 if it is a Big 4 firm; otherwise 0	Independent binary variable (X3)

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The first step is to answer the research question 1 and test the hypothesis H1about the existence of earnings management behavior of listed companies in Vietnam. This issue was conducted on the basis of frequency statistics and histogram charts to examine the statistical distribution of net profit ratios.

The second step will answer the research question 2 and test hypotheses about the impact of business sectors, debt ratios, and independent audit on earnings management. The second data processing step depends on the first test result, when H1 is recognized. To test hypotheses H2, H3, and H4 binary logistic regression analysis will be applied because the dependent variable (Y) is encoded in binary form (0, 1).

4. Resutls of data analysis

4.1. Verify the existence of earnings management of listed companies in Vietnam

The results of statistical analysis through probability distribution of net profit ratios of 183 listed companies during 7 years, corresponding to 1,281 observations are shown in the following figures and tables:

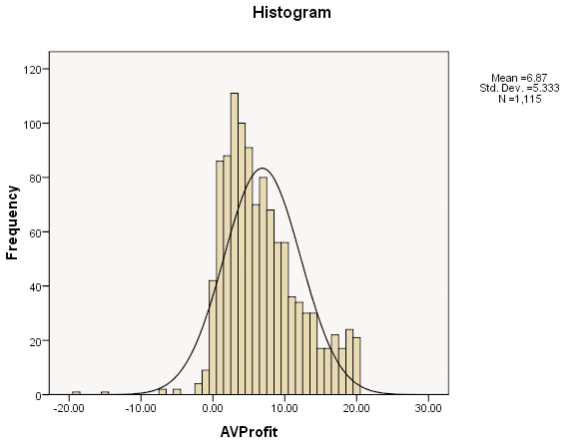

Figure 1: *Probability distribution of net profit ratios*

Among 1,281 observations during the 7-year period (2009 - 2015), only 1,115 observations were retained for analysis to ensure the density distribution of net profit ratios. Observations with a net profit ratios out of +/- 20% will be excluded from the dataset (166 observations are excluded).

Table 2: *Descriptive statistics of net profit ratios*

(AVProfit)

N	Valid	1115
	Missing	0
Mean		6.8700
Median		6.0000
Std. Error of Mean		.09420
Std. Deviation		5.333
Skewness		.365
Kurtosis		.424
Minimum		-19.00
Maximum		20.00

Figure 1 shows the probability distribution of net profit ratios of listed firms mostly in the range 0-7%, with an average value of 6.87. The standard deviation of the mean is very low (0.094), indicating that the sample mean is reliable and can be generalized to the population. Especially, there are almost no enterprises reporting negative profit. The threshold theory or "cross the red line" has been partially verified, showing that most enterprises want to report a positive rate of return. The value of skewness = 0.365, which shows that the majority of the frequency of the probability distribution is on the right of zero, indicating that it is not a normal distribution. Test Kolmogorow-Smirnov with sig. = 0.000 and Q-Q plot also confirmed that AVProfit does not follow the standard distribution. Statistical results on the probability distribution of net returns indicate that these findings are consistent with studies conducted by Hayn (1995), Burgstahler & Dichev (1997), Degeroge et al. (1999). These studies show that the probability distribution of net profit of firms does not follow the standard distribution with most companies with profit ratio over zero with a reasonable distance - these firms are classified into groups that make adjustments to reported profits. Based on the results of the probability distribution and previous studies, it can be concluded that the hypothesis H1 has been confirmed, proving the existence of profit adjustment within listed companies in Vietnam in order to avoid reporting a negative profit margin.

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4.2. Verify the factors affecting the earnings management

The probability distribution has shown that there exists earnings management of listed companies on the stock market of Vietnam; so the next part of this study will examine the influence of factors on the earnings management of firms. As mentioned above, companies with a net profit ratio between 0 and 7% are reported to have adjusted profitability and received the value of 1, while others have a value of 0. Binary Logistic regression was used to test hypotheses related to the second research question.

4.2.1. Business sectors and earnings management

Companies are classified by industry/sectors based on the classification of the State Securities Commission and classification of the website cophieu68.vn with some adjustments to ensure the density of data analysis. As a result, 14 groups of industries were classified and coded from 1 to 14. The results of the logistic regression analysis between earnings management variable (Y) and business sector - independent variable (X1) were as follows:

Table 3: *Logistic regression between earnings management and business sectors*

		B	Wald	df	Sig.	Exp(B)	Count
Step 1[a]	X1		40.766	13	.000		
	Plastic	.836	2.254	1	.036	2.940	47
	Fishery	1.576	8.726	1	.002	5.115	41
	Trade	1.999	15.118	1	.000	8.375	86
	Bankings	-.262	.226	1	.937	1.045	36
	Construction materials	1.363	7.896	1	.001	4.662	80
	Telecommunication	1.190	5.026	1	.042	2.660	53
	Chemicals and pharmaceuticals	1.216	5.558	1	.017	3.101	83
	Mineral	1.139	4.823	1	.015	3.500	47
	Manufacturing	1.078	5.782	1	.001	4.098	248
	Energy, oil & gas	1.000	4.734	1	.011	3.253	109
	Food processing	1.520	8.576	1	.001	5.089	66
	Construction and real estate	.693	2.351	1	.002	4.019	140
	Transportation	.511	.903	1	.349	1.609	52
	Constant	-.693	2.883	1	.040	.421	

Overall, the logistic regression showed that the sector of operation had a statistically significant influence on the earnings management behavior of firms (sig. <0.05). In detail, there are 13 (14-1) verified domains in which 11 sectors show a statistically significant and positive impact on the earnings management of listed firms (sig. <0,05; B> 0); on the other hand, Odds Ratio values (Exp (B)) of these sectors are > 1, indicating a high level of profit adjustment. Among 11 sectors, Trade ranked first with the Odds ratio of 8.38; followed by Fishery (5.12); Food (5,09); Construction materials (4.67); manufacturing (4.10); Construction & Real Estate (4,02); Mineral (3.50); Energy, oil & gas (3.25); Chemicals and pharmaceuticals (3.10); Plastic (2.94); and Telecommunications (2.66).

From the results of the regression analysis, it can be concluded that the business sector has a significant influence on the earnings management behavior of some listed companies on the stock market of Vietnam. Thus, the hypothesis H2 has been confirmed.

4.2.2. Debt ratio and earnings management

The logistic regression showed that the debt-to-equity ratio had a statistically significant impact on the earnings management of listed companies on the Vietnam's stock market (sig = 0.017 <0, 05, B = 0.067> 0, Exp (B) = 1.069> 1). Therefore, the hypothesis H3 is confirmed, indicating that the pressure from borrowing and debt also causes listed companies to adjust profit on the? financial statements.

4.2.3. Independent audit and earnings management

Regression results show that auditing firms have a statistically significant effect on the earnings management behavior of listed companies on the stock market in Vietnam (sig = 0.000 <0.05; > 1; B = - 0.567 <0)

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Table 4: *Logistic regression between earnings management and debt ratio*

		B	Wald	df	Sig.	Exp(B)
Step 1[a]	X2	.067	5.744	1	.017	1.069
	Constant	.294	15.093	1	.000	1.342

Table 5: *Logistic regression between earnings management and independent audit*

		B	Wald	df	Sig.	Exp(B)
Step 1[a]	X3	-.567	20.342	1	.000	1.340
	Constant	.633	62.503	1	.000	1.883

Table 6a: *Audit Crosstabulation*

		Audit		Total
		= non big 4	= big 4	
0 = no earnings management	% within Earnings	53.7%	46.3%	100.0%
	% within Audit	34.7%	48.4%	39.9%
1 = earnings management	% within Earnings	67.2%	32.8%	100.0%
	% within Audit	65.3%	51.6%	60.1%
Total	% within Earnings	61.8%	38.2%	100.0%
	% within Audit	100.0%	100.0%	100.0%

Table 6b: *Chi-Square Tests*

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	20.508[a]	1	.000		
Likelihood Ratio	20.410	1	.000		
N of Valid Cases[b]	1115				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 170.02.

b. Computed only for a 2x2 table

The results presented on the Table 6a and Chi-square test (Table 6b) show that Pearson Chi-Square = 20.508 with p-value = 0.000 <0.05, indicating that the relationship between the audit firm and earnings management, in which companies audited by Big 4 correspondingly to 220 observations (32.8%), while those not audited by Big 4 with 450 observations (67.2%). That proved that the big auditing firms (Big 4) significantly reduce the earnings management of listed companies on the stock market in Vietnam. Hypothesis H4, which demonstrates the impact of independent audit on earnings management of listed companies in Vietnam, is confirmed.

5. Conclusions and implications from research results

Through empirical evidence, the research has achieved two objectives: (i) to demonstrate the existence of earnings management on the stock market of Vietnam, and (ii) to clarify the factors affecting earnings management of these companies.

Based on the probability distribution of the net profit ratios of listed companies for the period of 7 years, it can be seen that most of the companies had adjusted their earnings to avoid reporting a negative result, adjusting range mostly concentrated in the range 0-7%.

Among hypothetical factors influencing earnings management, empirical results show that there are relationships between business sectors, debt-to-equity ratio, and audit firms and earnings management behavior of listed companies. Some business sectors with high flexibility such as trade, seafood and food processing... have a great impact on earnings management compared to others. Meanwhile, the banking and insurance due to strict regulations in business operations, and accounting, so the empirical results do not find the trend of earnings adjustment in these groups. This finding is in contrast to the Healy & Whalen (1999) and Collins et al. (1995), but agrees with Sun & Rath (2009) conclusion. In addition, auditing firms also affect earnings management of listed companies as audited by Big 4 will reduce earnings management behavior. The pressure from high debt-to-equity ratios also affected earnings management of listed firms. This finding is consistent and confirms the findings of Deegan (2009), Watts and Zimmerman (1986).

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Findings from the study have contributed to the theoretical and empirical evidence on the earnings management behavior of listed companies in Vietnam, which provided the basis for further research on this subject by examining the distribution of net profit margin of enterprises over time.

The recommendations from the study are:

- It should be officially recognized earnings management behavior of listed companies from the standards setting bodies and the State Securities Commission. At the same time, standard setting bodies also need to set limits on the absolute and/or relative amounts of earnings adjustment in order to unify and facilitate audit firms in the audit of financial statements of listed companies.

- For users of financial statements (investors), caution should be taken on earnings information reported by listed companies, especially those with stable profit for many years.

The following limitations of the article are also the basis for future studies. The research model can increase the sample size, which can be investigated for both non-listed and other types of businesses. In addition, factors influencing earnings management can be broadened by adding independent variables such as size of enterprise, duration of operation, number of board members, internal audit, etc. On the other hand, the fluctuation range of profit may be broader, for example, between 0-10% or from -5 to + 5% to examine the difference from the results presented in the article. Additional research in the future will reassess presented results and also contribute to overcoming the limitations inherent in this study.

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Summary

Dựa trên dữ liệu từ 1.281 quan sát trên thị trường chứng khoán Việt Nam giai đoạn 2009 - 2015, bài viết đã làm rõ hai vấn đề cơ bản: (i) nhận diện sự tồn tại của hành vi điều chỉnh lợi nhuận của các doanh nghiệp niêm yết, và (ii) phân tích các nhân tố ảnh hưởng tới hành vi điều chỉnh lợi nhuận như ngành nghề kinh doanh, lựa chọn hãng kiểm toán độc lập và tỷ suất nợ trên vốn chủ sở hữu. Các phát hiện của bài viết góp phần bổ sung cho các nghiên cứu còn khá hạn chế về điều chỉnh lợi nhuận trên thị trường chứng khoán Việt Nam nói riêng cũng như trong công bố thông tin về kết quả kinh doanh của các doanh nghiệp Việt Nam nói chung.

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