

**MINISTRY OF EDUCATION AND TRAINING  
NATIONAL ECONOMICS UNIVERSITY**

-----

**VU THI KIM LAN**

**THE IMPACT OF THE INFORMATION OF  
EXCHANGE RATE DIFFERENCES ON FINANCIAL  
STATEMENTS ON THE STOCK PRICE OF NON-  
FINANCIAL JOINT STOCK COMPANIES LISTED  
ON THE VIETNAM'S STOCK MARKET**

**Speciality: ACCOUNTING, AUDITING AND ANALYSING  
Code: 9340301**

**DISSERTATION ABSTRACT**

**HANOI - 2020**

**THE DISSERTATION HAS BEEN COMPLETED AT  
NATIONAL ECONOMICS UNIVERSITY**

**Advised by:**

**Assoc. Prof. Dr. NGUYEN THI ĐONG**

**Reviewer 1:**

**Reviewer 2:**

**Reviewer 3:**

**The Dissertation have been defended at the council of  
National Economics University**

**At      date      month      year 2020**

**The dissertation can be found at:**

- National Library of Vietnam**
- Library of National Economics University**

## INTRODUCTION

### 1. The reasons of selecting the research topic

The main purposes of financial statements are to provide the useful information in order to help users make decisions efficiently. The good accounting system is able to create and provide users with the suitable and exact information in decisions. The investors are the most important groups who using the accounting information to decide buying or selling securities. The investors want to gain the maximum expected profits when investing securities. As a result, they will buy the stocks of company that are able to be achieved high profits and sell the company's stocks which they predict that their profits will be able to be decreased in the future (Lucas, 1970). Moreover, in the context of globalization, the trade between countries continues to be promoted strongly. Therefore, there are more transactions of foreign currency and they become more popular in the daily transactions of companies. The exchange rate difference is an important information and affects the truth and rationality of financial statements of the companies which have many transactions arising related to foreign currency. Otherwise, the exchange rate differences are revenues or costs. Profits or losses from the exchange rate differences have direct impact on the company's incomes. As a result, they affect earnings per share (EPS) and market price per share of company. There had many researches on the influences of the exchange rate differences on market price per share. These researches were to be performed in both developed countries (UK, USA, Australia, Italy,...) and developing countries (Indonexia, Vietnam,...). However, the previous study results were shown inconsistently. It can be seen that some researches proved that the exchange rate differences had a significant impact on the stock price (Soo & Soo, 1994; Al-Shboul & Alison, 2008; Bartov, 1997; Le Vu Ngoc Thanh et al., 2015; Setyaningrum & Siregar, 2015). In contrast, some studies pointed out that there are insignificant relationship between exchange rate differences and the stock price (Bazaz & Senteney, 2001; Garlicki et al., 1987; Bartov & Bodnar, 1994...).

In context of Vietnam, there have been many different ways to record and present the exchange rate differences in the period from 1997 until now. In period of from 1997 to 2001, the exchange rate differences were recorded in according to the Circular No. 44/1997/TC-TCDN. In 2002, Vietnamese Accounting Standard No. 10 (VAS 10) has been applied to record and present the transactions related to exchange

rate for 7 years. In accordance of VAS 10, both the exchange rate differences which arise upon transactions occurring in fiscal year and upon revaluation of monetary items of foreign currency origin are reflected in the profit/loss on the income statement. All exchange rate differences arising upon the conversion of the financial statements of foreign-based establishments for inclusion in the financial statements of the reporting enterprises must be classified as owners' equity of the reporting enterprises till such net incomes are liquidated. The Circular No. 201/2009/TT-BTC were issued in 2009 and so companies have been permitted to apply either the Circular No. 201/2009/TT-BTC or VAS 10 to reflect the exchange rate differences from 2009 to 2011. From 2012 to 2014, the recording of exchange rate differences has complied with VAS 10 again (abiding by the Circular No. 179/2012/TT-BTC). In period of 2015-2017, the presenting of exchange rate differences must be conformed with the Circular No. 200/2014/TT-BTC and the Circular No. 53/2016/TT-BTC. In practice, the different methods which are applied to record the exchange rate differences, will have an impact on the profit/loss information related to the exchange rate differences on financial statements. Therefore, the research question is whether investors have different reaction to the exchange rate differences presented on the financial statement on the base of the different accounting policies?

In Vietnam, the researches relating to the exchange rate differences have not been studied fully and the research methods used in these researches in a simple way (Truong Thi Thu Hien, 2011; Nguyen Thi Hong Hanh & Nguyen Thu Thuy, 2014; Nguyen Quang Thanh, 2017...). Le Vu Ngoc Thanh et al. (2015) tested the relationship between the stock price (measured by the market price of stockholder's equity) and the exchange rate differences related to revaluation of monetary items of foreign currency origin. The weakness of this research was that the sample was selected only in period 2009-2011. As such, there are few studies which using quantitative model to verify the impact of the exchange rate differences on the stock price in Vietnam. Particularly, according to my knowledges, there is no research which studies the effects of the exchange rate differences on stock price of the non-financial companies listed on Vietnam's Stock Market in period 2009-2017. Furthermore, the risk management of the exchange rate plays an important role in all transactions related to foreign currency. However, the non-financial companies listed on Vietnam's Stock Market are not really

interested in the risk management. There are few companies which use financial derivative instruments to minimize risks arising from exchange rate volatility.

From the research gap and practice, I selected the topic for my thesis as a following: " **The impact of the information of exchange rate differences on financial statements on the stock price of non-financial joint stock companies listed on the Vietnam's Stock Market**"

## 2. The research objectives and questionnaires

The main research objective is studying the impact of the exchange rate difference information presented on the financial statement on stock price of non-financial joint stock companies listed on Vietnam's Stock Market.

**Research question 1:** What is the accounting practices of recording and presenting the exchange rate differences on financial statements of non-financial joint stock companies listed on Vietnam's Stock Market?

**Research question 2:** How is the influence of the exchange rate differences presented on financial statements on the stock price of non-financial joint stock companies listed on Vietnam's Stock Market?

**Research question 3:** How does the changing in accounting policy of exchange rate differences affect the stock price of the non-financial joint stock companies listed on the Vietnam's Stock Market?

## 3. Research subject and scope

**Research subject:** Focusing on the impact of the exchange rate difference information on the stock price of non-financial joint stock companies listed on Vietnam's Stock Market.

### **Research Scope:**

- **Research time:** The research data was used in this thesis, was collected in the period from 2009 to 2017. The research data was divided into 3 different stages, in which the first stage lasted from 2009 to 2011, the second stage started from 2012 to 2014 and the last stage was from 2015 to 2017. I decided to select this data because in this period, the accounting policy relating to the exchange rate differences have been made change of 3 times by Ministry of Finance.

- **Spatial scope:** The research data included 154 non-financial joint stock companies listed on Vietnam's Stock Market. The companies which were selected,

listed on Vietnam's Stock Market before 2009 and their listed time has lasted continuously until at least the start of 2018.

- **Content scope:** The impact of the exchange rate difference information on the stock price of non-financial joint stock companies listed on the Vietnam's Stock Market. The exchange rate differences do not include the exchange rate differences arising in construction periods (pre-operation period).

## 4. The new contribution of dissertation

### **New academic contributions**

The Rational Expectation Theory, Efficient Market Hypothesis and Signaling Theory were applied in order to build and develop the model of the impact of the exchange rate differences which is presented on the financial statements on the stock price of companies. The research model was developed by transforming the stock price variable into two variables, "average stock price per day (by calculating the value of mean of stock price in a year)" to measure the real value of stock prices in a year and "average stock prices 6 days before and after the date of the announcement of financial statements" to measure the real value of stock prices at the time of the announcement of financial statements.

The dissertation has developed and transformed the accounting policy variable into two variables "a variable represents the change in policy accounting" and "another represents the accounting policy before and after the Circular No. 200/TT-BTC applied".

### **New findings and proposals were drawn from the research results of the dissertation**

This research was performed at Vietnam where the stock market has been an emerging market for the period of 2009 to 2017. In this period, the accounting policy of Vietnam has had 3 changes. The results pointed out that the exchange rate differences, which are presented on the income statement, had a positively significant impact on the stock price of the non-financial joint stock companies listed on Vietnam's Stock Market. However, the exchange rate differences, which are presented on the balance sheet, affect insignificantly the stock price of the non-financial joint stock companies listed on Vietnam's Stock Market. This research shows that the Rational Expectation Theory and Signaling Theory are suitable for explaining the changes in stock price of non-financial companies listed on the Vietnam's Stock Market. In contrast, the Vietnam's Stock Market has not met the hypotheses of efficient market.

This research proved that the changes in accounting policy affected the exchange rate differences on the financial statements and they had a significant impact on the stock price of the non-financial joint stock companies listed on Vietnam's Stock Market. The relationship between changes in accounting policy and the stock price is positive. In conclusion, the changes in accounting policy of the exchange rate differences is one of the important information which investors are interested in and these changes affect the investor's expectation of stock price.

Based on analyzing the situation of exchange rate risk management and quantitative analysis of derivative instrument (regression analysis and T-test), this research clarified that companies should choose derivative instruments because it helps decrease risk causing by exchange rate fluctuation and helps companies obtain their reasonable profit. As a result, it makes increase in stock price of companies.

On the base of the research results, some proposals and recommendations were given for investors, managers of companies and policy makers...

## **5. The structure of dissertation**

**Introduction: Introduce the research topic**

**Chapter 1: Literature Reviews**

**Chapter 2: Theory basic of the impact of exchange rate difference information which is presented on the financial statements on the stock price of listing companies**

**Chapter 3: Research methodology**

**Chương 4: Research results**

**Chương 5: Analyzing of the research results, some proposals and recommendations**

## **CHAPTER 1: LITERATURE REVIEWS**

The literature reviews synthesize and analyze the researches related to the factors that affect the share price, the studies of the impact of the exchange rate on the stock price and the studies of the influence of the exchange rate differences on the stock price. The researches were synthesized on the theoretical aspects, the method of application in experimental studies, limitations and on the basis of which the study gap is given.

### **1.1. The researches of the factors affecting the stock price of listing companies**

There are a lot of theoretical and empirical studies about the relationship between endogenous and exogenous factors that impact the common stock price. First of all, There are studies considering the impact of endogenous variables on the stock price. These variables consist of financial performance, company size, age company (Chang et al., (2008); Malhotra & Tandon, (2013); Kabajeh et al., (2012); ...). Secondly, the researches focus on the effects of exogenous factors (macro factors) to fluctuations of stock prices (Fisher, (1930); Fraser & Oyefeso, (2005); Jang & Sul, (2002); Moon et al., (2005); Tessaromatis, (1990), ...).

### **1.2. The researches of the impact of exchange rate on the stock price**

Over the past decades, there has been a lot of research on the impact of the exchange rate on stock price. The researches of the influence of the exchange rate on the share price in the two main directions are the Flow Oriented Models and Stock Oriented Models. As the traditional approach (Flow Oriented Models), the changes in the exchange rate leads to a change in the stock price. In contrast, in a portfolio approach (Stock Oriented Models), the exchange rate affects the stock price and vice versa the stock price has an influence on the exchange rate.

### **1.3. The researches of the effect of the information relating to exchange rate differences which presented on the financial statements on the stock price**

There are a lot of theoretical and experimental studies on the effects of the exchange differences on the share price. However, these study results are not consistent. There are studies that indicate a positive impact of the exchange rate difference on the stock price. In contrast, there are studies that point out a negative



relationship between the exchange rate differences and stock price and the other do not prove the impact of the exchange rate differences on the stock price.

Studies demonstrate the positive impact of profits/losses of the exchange rate differences on the financial statements on the stock price of listing companies, consist of the study of Al-Shboul & Alison (2008), Kim & Ziebart (1991), Bartov & Bodnar (1995), Soo & Soo (1994), Bartov (1997), Redman et al. (2013), Le Vu Ngoc Thanh et al. (2015) ... In these studies, the change in the price of stock is measured in different ways. It is measured in the daily, monthly or yearly capital gain, or average price of the shares, or the average stock price being determined by several stages. The exchange rate differences are measured by the profits/losses of the exchange rate differences reflected on the income statement or reflected in the stockholder's equity of balance sheet or the change in previous exchange rate differences comparing to the current exchange rate differences. The methodology of researches is mainly regression method to analyze the research data and test the research hypotheses.

In contrast, there are many studies that indicate the negative impact of the exchange rate differences on stock prices (Setyaningrum & Siregar, (2015); Louis, (2003); Pinto, (2005); Makin, (1978); Salatka, (1989); Ziebart & Kim, (1987), ...). The negative relationship is caused by labor costs being more difficult adjustment than other costs directly related to the exchange rate. Therefore, the change in exchange rate can lead to a decrease in sale price but the production costs do not reduce because of its labor costs. As a result, the total profits of companies can be reduced despite the profits of the exchange rate differences tend to increase. The stock price tends to adjust in reverse with the profits (losses) of the exchange rate differences.

In addition, there are studies that do not prove the relationship between the exchange rate differences and stock price (Dukes, (1978); Shank et al., (1979); Garlicki et al., (1987); Rezaee et al., (1993); Bartov & Bodnar, (1994); ...). Dukes (1978), Shank et al. (1979), Bartov & Bodnar (1994) indicated that the application of the SFAS No. 8 had no significant effect on the stock price of multinational companies. Garlicki et al. (1987), Rezaee et al. (1993) also showed that the profit and loss was recorded according to the SFAS No. 52, had insignificant impact on the capital market.

Moreover, on the world, the accounting standards of the exchange rate was applied firstly in the U.S. in 1931. Then, there are a series of studies of the impact of the change in accounting policies of the exchange rate difference on stock price.

Studies relating to the reaction of the stock price for the change in accounting policy of exchange rate differences had also resulted in inconsistently. Some researches indicated that there was a significant relationship between the changes in accounting policy and the stock price, but the other studies pointed that investors did not response to the changes in accounting policy of the exchange rate differences.

#### **1.4. The research gaps and orientation of dissertation**

*Firstly*, the studies of the influence of the exchange rate differences presented on the financial statements on the stock price are mainly performed abroad such as UK, USA, Australia, Italy, Indonexia... Studies were executed with the different context and period, so the results were given are inconsistency. In addition, the stock price measures of these researches also are different. In Vietnam, there is little research which focuses on this topic. Therefore, the research data, which was choosed, was that non-financial joint stock companies listed Vietnam's Stock Market having operations directly related to the exchange rate. hese companies were directly influenced by the Ministry of Finance's accounting regime of the exchange rate differences. Financial companies were not chosen in the research data because they abided by the regulations of Vietnamese State Bank rather than applied the regulations of Ministry of Finance. The operations of non-financial companies include the import and export activities of goods and foreign debts.

*Secondly*, the studies of the effect of change in accounting policies on the exchange rate difference on financial statements and the stock price have been researched both on the developed and developing countries (the US, UK, Australia, Indonexia...). In the context of the Vietnam's Stock Market, there have been few studies which analyse the impact of the change in accounting policy on the stock price, particularly in the period of form 2009 to 2017 (in this period, the accounting policy has 3 changes). Therefore, the effect of changes in Vietnam's accounting policy on stock price were chosen to research. On the other hand, the research also tested whether the investor's response to the current accounting policy of exchange rate differences is positive or negative. In particular, the research compared the impact of the exchange rate differences in period before applying the Circular No. 200/2014/TT-BTC on stock price to the impact of the exchange rate differences after applying the Circular No. 200/2014/TT-BTC on the stock price.

In conclusion, the research gap of the dissertation is that the research performed in Vietnam where has emerging stock market and there are only few studies of the influence of the exchange rate differences on the financial statements on stock price.

### CONCLUSION OF CHAPTER 1

In the literature review, I reviewed and analyzed the past researches with 3 main contents:

- (1) The researches of the factors affecting the market price on the stock market;
- (2) The researches of the macro factors of exchange rate affecting the market price;
- (3) The researches of the exchange rate differences on the financial statement relating to market price of companies listed on the stock market.

Based on the literature review, I defined the research gaps and the topic of my thesis.

## CHAPTER 2: THEORY BASIC OF THE IMPACT OF EXCHANGE RATE DIFFERENCE INFORMATION WHICH IS PRESENTED ON THE FINANCIAL STATEMENTS ON THE STOCK PRICE OF LISTING COMPANIES

### 2.1. Overview of the exchange rate

With the development of the world economy, the economic relationship of a country is increasingly being expanded and integrated with other countries in the world. The payment unit is not only a domestic currency but also includes a variety of foreign currencies. However, the money is stipulated by the laws of the country and its own characteristics. Therefore, it is essential to compare the value and purchasing power of the domestic currency with foreign currencies and between foreign currencies. The operation of converting this currency into another currency has made the definition of exchange difference. With the research content relating to the exchange rate differences arising in accounting, the "exchange rate" is defined as in VAS 10.

### 2.2. Accounting of the exchange rate differences on financial statements

According to IAS 21-8 (2005): "Exchange rate is the ratio of exchange for two currencies". Thus, to form exchange rate, it has the relationship between foreign currency and the local currency (Functional currency). Foreign currency is a currency other than the functional currency of the entity. The functional currency is the currency of the principal economic environment for which the business operates.

The application of the exchange rate to accounting and to be as a basis for determining the exchange rate differences on the financial statements depends on two cases: foreign transactions or translation of foreign operation. According to IAS 21-8 (2005): "Exchange difference is the difference resulting from translating a given number of units of one currency into another currency at different exchange rates".

According to the Circular No. 105/2003/TT-BTC which guided on VAS 10, a company has transactions relating to currencies which are different to reporting currency, the exchange rate differences will be arisen. Exchange rate difference is the difference arising from the actual exchange or conversion of the same amount of a foreign currency into the accounting currency at different exchange rates. However, since VAS 10 was born, Ministry of Finance has issued and regularly amended and

supplemented the guidances relating to the exchange rate difference in order to suit to the changes in business environment of companies.

### **2.3. Overview of stock and stock price of listing company**

Stock is proof and the certificate which defines ownership right of shareholders for the assets of a joint stock company. Ownership right of shareholders corresponds to the number of shares that the shareholder holds. So, stocks are also known as equity stocks.

The common stock price of listing company includes fair value, book value and market price of common stock.

### **2.4. Theories relating to the influence of the exchange rate difference information presented on financial statements on the stock price of listed companies**

In the dissertation content, three theories are used, consist of Rational Expectation Theory, Efficient Market Hypothesis and Signaling Theory. These theories are as the basis for building the research hypotheses, model and explaining the impact of the exchange rate differences on the stock price.

## **CONCLUSION OF CHAPTER 2**

In this chapter, I reviewed the theory of exchange rate, the accounting of the exchange rate differences on the financial reports and market price of common stock. Moreover, I presented the theories relating to the exchange differences on financial reports which has an impact on market price of listing companies consisting of the Rational Expectation Theory, the Efficient Market Hypothesis and the Signaling Theory.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1. The research processes**

To carry out research, the author performs a five-step process including: literature reviews, building the theoretical models and hypotheses, collecting data, building and analyzing the experimental models

### **3.2. Research hypotheses**

Firstly, the influence of the exchange rate difference on the stock price is not consistent between studies in different contexts and phases. On the other hand, the exchange rate differences on the financial statements, is divided into two main contents, which is the exchange rate differences recorded on the income statement and others reflected in stockholder's equity on the balance sheet. Thus, two hypotheses are given as followings:

*H1: The exchange rate differences on the income statement has a positively significant impact on the stock price*

*H2: The exchange rate differences on the balance sheet has a positively significant impact on the stock price*

Secondly, the exchange rate differences on the financial statements are influenced directly by accounting policy. The change in accounting policies in different periods will affect the exchange rate difference information that are reflected on the financial statements. Consequently, the next hypotheses are given as followings:

*H3: The exchange rate differences on the financial statements in different periods has a differently significant impact on the stock price*

*H4: The exchange rate differences on the financial statements which abiding by the Circular No. 200/2014/TT-BTC has a significant impact on the stock price*

*H5: The exchange rate differences on the financial statements which abiding by the Circular No. 200/2014/TT-BTC has a differently significant impact on the stock price comparing to the impact of the exchange rate differences on the financial statements which abiding by the previous Circular on stock price.*

### 3.3. The research model and variables

#### 3.3.1. The research model

The research models which are used in the dissertation, are developed from the models of Soo & Soo (1994) and Ohlson (1994).

According to Ohlson (1994), the theoretical models are built to analyze the impact of the exchange rate difference on financial statements on stock price in the dissertation as followings:

##### Model 1:

$$P1_{i,t} = \alpha_0 + \alpha_1 * BVPS_{i,t} + \alpha_2 * EPS1_{i,t} + \alpha_3 * CLTG1_{i,t} + \alpha_4 * CLTG2_{i,t} + e_{i,t} \quad (1)$$

The Equation (1) is used to test 2 hypotheses (H1 and H2) which were given in the section 3.2 and they were detailed into two-practical hypotheses as followings:

*H1(TN): CLTG1 has a positively significant impact on P1*

*H2(TN): CLTG2 has a positively significant impact on P1*

The Soo & Soo Model (1994) differs from the Ohlson Model (1995) which is considering the effects of accounting information on the stock price at the time of publication of the financial statements. In addition, the Soo & Soo Model adds a policy variable to analyze the impact of accounting policies on the exchange rate difference on the financial statements, thereby the accounting policies affect indirectly the stock returns.

The information on the Vietnam's Stock Market has not identified fully the forecast variables of earnings per share before the reporting period yet, so that the author does not use UE variables in the research model which UE is substituted by EPS1 (Earnings per share not including profit (loss) of exchange rate). Besides, in this model, the author uses the dummy variable D1 to represent the accounting policy of the exchange rate difference of the three-stage changes in accounting policy. Therefore, the research model was constructed in the context of Vietnam's Stock Market as followings:

##### Model 2:

$$P2_{i,t} = \alpha_0 + \alpha_1 * EPS1_{i,t} + \alpha_2 * CLTG1_{i,t} + \alpha_3 * CLTG2_{i,t} + e_{i,t} \quad (2a)$$

$$P2_{i,t} = \alpha_0 + \alpha_1 * EPS1_{i,t} + \alpha_2 * CLTG1_{i,t} + \alpha_3 * CLTG2_{i,t} + \alpha_4 * D1_{i,t} + e_{i,t} \quad (2b)$$

The equation (2a) and (2b) are used to test H1, H2 and H3 hypothesis at the section 3.2 and they are detailed into 3-empirical hypotheses as followings:

*H3(TN): CLTG1 has a positively significant impact on P2*

*H4(TN): CLTG2 has a positively significant impact on P2*

*H5(TN): D1 has a significant impact on P2*

To test the impact of exchange rate differences on market price of non-financial companies listed on the Vietnam's Stock Market, the dependent variable which is given in the model, is the daily average market price before and after 6 days of publishing the yearly financial reports.

**Model 3:** Model 3 is used for analysing whether the impact of the exchange rate differences on the stock price of non-financial joint stock companies listed in Vietnam's Stock Market before and after the Circular No. 200/2014/TT-BTC is different. This model was developed from the Soo & Soo Model. In this model, dummy variable of D2 is used to represent the current accounting policy of the exchange rate differences (the Circular No. 200/2014/TT-BTC).

$$P2_{i,t} = \alpha_0 + \alpha_1 * CLTG1_{i,t} + \alpha_2 * CLTG2_{i,t} + \alpha_3 * D2_{i,t} * CLTG1_{i,t} + \alpha_4 * D2_{i,t} * CLTG2_{i,t} + \alpha_5 * EPS1_{i,t} + e_{i,t} \quad (3)$$

The equation (3) is used to test H4 and H5 hypothesis at the section 3.2 and they are detailed into 2-empirical hypotheses as followings:

*H6(TN): The exchange rate differences reported on income statement which applying the Circular No. 200/TT-BTC (D2\*CLTG1) has a significant impact on stock market (P2)*

*H7(TN): The exchange rate differences reported on balance sheet which applying the Circular No. 200/TT-BTC (D2\*CLTG2) has a significant impact on stock market (P2)*

Moreover, to test more detailly whether the impact of exchange rate differences on the financial statements before and after applying the Circular No. 200/2014/TT-BTC, the author uses additionally the T-Test to test the following hypothesis:

*H8(TN): P2 of the companies in the period of applying the Circular No. 200/2014/TT-BTC has a significant difference with P2 of the companies in the period before applying the Circular No. 200/2014/TT-BTC*

#### 3.3.2. The research variables

**Dependent variables:** Dependent variable in the research model is the market price of stock of non-financial joint stock companies listed on Vietnam's Stock Market.

The market price of stock is the closing price a day. The stock price which is used in this model, consists of: (1) The dependent variable which is the daily average stock price (P1), is used for the equation of 1. These equations are built on the basic of Ohlson model. The Ohlson model reviews the value of company in a period (year) so the daily average stock price in a year is selected. (2) The dependent variable is the average stock prices 6 days before and after the date of the announcement of financial statements (P2)

**Independent variables:** Independent variables in the research include the exchange rate differences per stock (CLTG1 and CLTG2), book value per share (BVPS), earnings before the exchange rate differences per stock (EPS1) and accounting policy (D). The variables are measured as followings:

$$CLTG1 = \frac{\text{Profits/losses of the exchange rate differences on income statement}}{\text{Number of common stock outstanding}}$$

$$CLTG2 = \frac{\text{Profits/losses of the exchange rate differences on balance sheet}}{\text{Number of common stock outstanding}}$$

$$BVPS = \frac{\text{Average stockholder's Equities} - \text{Average preferred stock value}}{\text{Number of common stock outstanding}}$$

EPS1

$$= \frac{\text{Net income} - \text{Profits/losses of the exchange rate differences on income statement}}{\text{Number of common stock outstanding}}$$

-Variable of D1 represents the changes in accounting policy. Variable of D1 will receive 1, 2 and 3 values corresponding to the three-stage policy changes. The author uses D1 variable in the equation (2b) to analyse the impact of change in accounting policies of the exchange rate differences on the stock price.

D2 variable is also the accounting policy variable, but difference from the D1 variable, the D2 variable will receive a value of 1 for the period which the companies apply the Circular No. 200/2014/TT-BTC (2015, 2016, 2017) and receive the value of 0 for the period before applying the Circular No. 200/2014/TT-BTC (from 2009 to 2014).

### 3.4. The method of collecting data

Research data which was the secondary data, was collected from audited financial statements of the non-financial joint stock companies listed on the Vietnam's Stock Market in the period from 2009-2017. Selected companies include the companies listed on the HNX and the HOSE. The research data excluded companies operating in the finance industry (such as banks, insurance, financial company because these were

institutions of specially financial structure and were strictly governed by the specific regulations of government) and companies not having sufficient data or not arising the exchange rate differences (Companies which have not sufficient data in the research period, were included because using the unbalanced data will increase the likelihood of failure and errors in the model (Baltagi, 2005)). Besides, the research selected companies having the annual accounting period matches to the fiscal year (starting on January 1<sup>st</sup> and ending on December 31<sup>st</sup>). As a result, the research sample, which was selected, consisted of 154 listing companies (corresponding to 1,386 observations), in which the HNX is 53 listing companies and the HOSE is 101 listing companies.

The data of derivative instrument is collected from the financial statement footnotes and annual report of listing companies in 2017.

### 3.5. Data processing and analysis methods

To test the research hypotheses, the quantitative methods, which were used, included the descriptive statistics, Pearson's correlation, Hausman's test, autocorrelation testing, testing of error variance, multicollinearity test, panel data regression with the support of STATA 14 software and T-Test (coefficient comparison test) with the support of SPSS 22 software.

Moreover, the method of case study is used to analyze detailly the situation of the exchange rate differences on the financial statements of non-financial companies listed on the Vietnam's Stock Market.

## CONCLUSION OF CHAPTER 3

In the chapter 3, the research process was designed to 5 steps: Reviewing the researches, building the theoretical model and hypotheses, collecting data, building the practical model and analyzing the results obtained. The research model, variables of this model and the hypotheses were presented detailly. Otherwise, the method of collecting data and processing this data were pointed out clearly. The quantitative method included the descriptive statistics, the Pearson's correlation, auto-correlation testing, multicollinearity testing, error variance testing, Ramsey's testing, panel data regression and t-test.

## CHAPTER 4: RESEARCH RESULTS

### 4.1. Overview of Vietnam's Stock Market and listing companies

Vietnam's Stock Market officially was born on 11/07/1998 according to the Decree No. 48/1998/ND-CP. On the day, the Prime Minister also signed the Decision No. 127/1998/QĐ-TTg to establish two Stock Exchanges including: Hanoi Stock Exchange and Ho Chi Minh City Stock Exchange. Vietnam's Stock market officially operated since Jul 2000 with 2 listing companies as SAM and REE. In December, 2018 (over 18 years of operation), on the HOSE, there are 373 listing companies including 72 financial companies (accounting for nearly 20% of the listing companies) and 301 non-financial companies (accounting for more than 80% of the listing companies). On the HNX, there are 376 listing companies including 39 financial companies (accounting for more than 10% of the listing companies) and 337 non-financial companies (accounting for nearly 90% of the listing companies).

### 4.2. The status of the accounting of the exchange rate differences of non-financial joint stock companies listed on the Vietnam's Stock Market.

Since the period 2009-2011, there has been the option of recording the exchange rate differences arising from re-assessment of foreign currency items at the end of the year. As a result, this period existed inconsistency in the calculations of the exchange rate differences of companies, this leads to reducing the ability to compare company's financial situation because of applying the different accounting policies. According to research data of 154 listed companies, there has 23.38% of companies having changed accounting policies from the Circular No. 201/2009/TT-BTC to VAS 10 in this 3-year periods. As a result, the principle of consistency within the business have not been complied with.

During the research period, it can be seen some of the listing joint stock companies having high losses of the exchange rate differences such as HT1 in 2017 with a loss of more than 142 billion VND or BTS in 2011 with a loss of over 227 billion VND. These companies did not apply the derivative instruments.

### 4.3. The status of management of risks of exchange rate of non-financial joint stock companies listed on Vietnam's Stock Market

For analysis of the status and risk management policy of non-financial companies listed on the Vietnam's Stock Market, the information of the risk management in 2007 of 154 listing companies was collected in the financial statements consisting of governance reports, financial statement footnotes and annual reports. The detailed data was presented in the following table:

**Table 4.8: The numbers of companies have the management of risks of exchange rate in 2017**

Type of policy	Companies		Total companies
	Yes	No	
1. Having the strategic risk management	63	91	154
2. Using derivative instrument	20	134	154
3. Tracking the changes in exchange rate	63	91	154
4. Sensitivity analysis	40	114	154
5. Optimal payment deadlines	54	100	154

*Sources: Summaried from the financial statements, governance management reports, annual reports of listing companies*

It can be seen that the non-financial companies listed on the Vietnam's Stock Market not be interested in risk management. Of the 154 listed companies, there were only 63/154 companies (corresponding to 40.91%) having announcement of the strategy of risk management in the reports provided to investors. The strategies of risk management of companies include: using of derivative instrument, tracking change in exchange rate, sensitivity analysis and optimal payment deadline

### 4.4. Empirical results of the influence of the exchange rate difference information presented on financial statements on the stock price of non-financial companies listed on the Vietnam's Stock Market

The Hausman test results showed that the Prob > chi2 coefficient is less than 5%, so the H0 hypothesis (H0: difference in coefficients not systematic) is rejected, so the random effect model was suitable for the P1 and P2 in all empirical models.

These models have both heteroscedasticity and autocorrelation. The models have not multicollinearity because all the VIF coefficient of the variables are smaller than 2 (Hair et al., 2010).

Due there are heteroscedasticity and autocorrelation in the models, FGLS method (Cochrane-Orcutt method) is applied. The assumption of the FGLS method is residual variance having exponential relationship with independent variables.

The equation of 1 is written as the followings:

$$P1_{i,t} = 2,2603 + 0,0043*EPS1_{i,t} + 0,0033*CLTG1_{i,t} + 0,0017*CLTG2_{i,t} + 0,0006*BVPS_{i,t} + e_{i,t} \quad (1)$$

As a result of the regression, all variables in the equation (except CLTG2) have a significant impact on the stock price of the non-financial companies listed in Vietnam's Stock Market with the Sig coefficient ( $P > z$ ) less than 5%. It means that the H1(TN) hypothesis is accepted or the exchange rate differences reflected on income statements has a significant impact on the change of the stock price. However, the CLTG2 Sig coefficient of 36.10% is greater than the 5%, it means that the H2(TN) hypothesis is rejected or the exchange rate differences reflected in the stockholder's equity on the balance sheet has insignificant impact on the change of stock price. The regression coefficient of CLTG1 is 0.0033, it shows that when CLTG1 increase 1 unit (1 VND/share), the average stock price will increase 0.0033 thousand VND /share (or 3.3 VND/share).

The equation of 2a is written as the followings:

$$P2_{i,t} = 10,56098 + 0,00548*EPS1_{i,t} + 0,00519*CLTG1_{i,t} + 0,00179*CLTG2_{i,t} + e_{i,t} \quad (2a)$$

The regression result (2a) shows that all independent variables in the equation (except CLTG2) have positively significant impact on P2 at 5%. Specifically, The exchange rate differences reflected on income statement (CLTG1) has a significant effect on the P2 with a P-value of less than 5% or the H3(TN) hypothesis is confirmed. With regression coefficient of 0.00519, it is revealed that when CLTG1 increases 1 VND/share, P2 will increase 0.00519 thousand dong (5.19 VND/share). However, profit (loss) of exchange rate differences reflected in the stockholder's equity (CLTG2) does not affect significantly P2 at a meaning of 5% or the H4(TN) hypothesis is rejected.

The equation of 2b is written as the followings:

$$P2_{i,t} = 1,0207 + 0,0056*EPS1_{i,t} + 0,0043*CLTG1_{i,t} + 0,0018*CLTG2_{i,t} + 4,5593*D1_{i,t} + e_{i,t} \quad (2b)$$

The equation regression result (2b) shows that when adding the D1 (policy variable), the equation (2b) has better explanation of the variation of the stock price compared to the equation (2a). Specifically, the independent variables in the equation (2a) explain 43.06% of the change of the stock price, whereas the independent variables in the equation (2b) explain 44.88% of the change in the stock price. According to the regression result, the CLTG1 and EPS1 variables have a significant and positive effect on the stock price, but the variable CLTG2 has no significant effect on stock price at 5%. It is found that the D1 variable has a significant impact on the stock price (Sig coefficient of 0.0000) or the H5(TN) hypothesis is asserted. With a regression coefficient of 4.5593, it shows that the impact of the policy variable D1 on the stock price is positive.

Additionally, in order to further clarify the distinct influence of the exchange rate difference on stock price before and after applying the Circular No. 200/2014/TT-BTC, the equation (3) is used to test the H6(TN) and H7(TN) hypothesis. The equation (3) is written as follows:

$$P2_{i,t} = 10,4362 + 0,0062*CLTG1_{i,t} + 0,0027*CLTG2_{i,t} + 0,0121*D2_{i,t}*CLTG1_{i,t} + 0,0160*D2_{i,t}*CLTG2_{i,t} + 0,0055*EPS1_{i,t} + e_{i,t} \quad (3)$$

The regression result shows that the combination variable between the policy variable D2 and CLTG1 has a significant impact on the stock price at a meaning of 5% or the H6(TN) hypothesis is proved, but the variable combining between the policy variable D2 and CLTG2 does not affect significantly stock price at the statistical level of 5% (sig coefficient is 0.0540) or the H7(TN) hypothesis is rejected.

The T-test result shows that: The Levene test has the Sig coefficient of less than 5%. Therefore, the T-test result used is to assume the variance is not equal. The T-test results showed that the Sig coefficient was 0.001 to less than 5%, so it asserts the H8(TN) hypothesis or there was a significant difference between the average stock price of the company's group applying the Circular No. 200/2014/TT-BTC and average stock price of the company's group not applying the Circular No. 200/2014/TT-BTC. The value coefficient of average difference is -5.7786 indicating the average stock

price before the period of adoption of Circular No. 200/2014/TT-BTC is lower than the average stock price in the application period Circular No. 200/2014/TT-BTC.

In conclusion, firstly, the research pointed out that the rational expectation theory and signalling theory are suitable for explaining the impact of exchange rate differences on MP. Particularly, the information of BVPS, EPS1 and exchange rate differences have positively significant effect on MP. Otherwise, the efficient market hypotheses is not suitable for the application to explain the fluctuation of MP in the context of the Vietnam's Stock Market. This is completely consistent because the Vietnam's stock market is an emerging market and the hypothesis of efficient market is difficult to satisfy due to the information asymmetry.

Secondly, the research proved that the change in the accounting policies has a significant impact on the exchange rate differences. As a result, the MP of non-financial companies listed on the Vietnam's Stock Market is also fluctuated by this information. The impact of the change in the accounting policies on MP is positive and significant. Therefore, the change in the accounting policies is one of the important information with investors and has a significant effect on the investor's expectation of MP.

#### CONCLUSION OF CHAPTER 4

The research results were met the research objective of the thesis. Detail, in the chapter 4, the results were obtained as followings: The first, most of managers of listing companies tend to choose the accounting policies of exchange rate differences which brings to benefit to their companies. The second, the exchange rate differences which were reflected profits or losses on the Income Statements, affect positively and significantly MP. The third, the exchange rate differences which were recorded shareholder's equities on the Balance sheets, has insignificant impact on MP. The fourth, the research proved that the change in the accounting policies has a significant impact on the exchange rate differences on the financial statements and so affects significantly MP. The effect of the change in the accounting policies on MP is positively. Finally, the MP of companies applying the Circular No. 200/2014/TT-BTC and average stock price of the company's group not applying the Circular No. 200/2014/TT-BTC.

### CHAPTER 5: ANALYZING OF THE RESEARCH RESULTS, SOME PROPOSALS AND RECOMMENDATIONS

#### 5.1. Analysing of the research results

According to the research results, it is sufficient basic to assert the H1(TN) and H3 (TN) hypothesis with a Sig coefficient smaller than 5%. However, the H2(TN) and H4(TN) hypothesis is rejected.

**Table 5.1: Results of testing the hypotheses relating to accounting policies of exchange rate differences**

Hypotheses	Theory	Empirical
H5(TN): D1 has a significant impact on P2	+/-	Significant impact (+)
H6(TN): D2*CLTG1 has a significant impact on P2	+/-	Significant impact (+)
H7(TN): D2*CLTG2 has a significant impact on P2	+/-	Insignificant impact
H8(TN): P2 of the companies in the period of applying the Circular No. 200/2014/TT-BTC has a significant difference with P2 of the companies in the period before applying the Circular No. 200/2014/TT-BTC	Significant / Insignificant impact	Differently significant impact

*Source: Elaborated by the author*

#### 5.2. Some proposals and recommendations

- Investors should consider the exchange rate differences reflected on the income statement of the non-financial companies listed on the Vietnam's Stock Market before deciding to buy or sell stocks.

- The non-financial companies listed on the Vietnam's Stock Market should be concerned the recognition and processing of the exchange rate differences on the financial statements, building the scientific risk management and selecting the derivative instruments to prevent risks of exchange rate.



- Ministry of Finance should restrict the release of separate documents approved for companies. Ministry of Finance should edit and add more fully some contents relating to the current accounting rules of exchange rate differences. In addition, Ministry of Finance should prematurely release the accounting standard of derivative instrument in order to replace the regulations of Circular No. 210/2009/TT-BTC.

### **CONCLUSION OF CHAPTER 5**

In this chapter, I reviewed and analyzed the research results and on the base of these results, I gave some recommendations to investors, listing companies and Ministry of Finance.

Firstly, the exchange rate differences reflected on the income statement of the non-financial companies listed on the Vietnam's Stock Market, therefore before deciding to buy or sell stocks, investors should analyze this information.

Secondly, the recognition and processing of the exchange rate differences on the financial statements, building the scientific risk management and selecting the derivative instruments to prevent risks of exchange rate should be more concerned by the managers of listing companies.

Thirdly, the release of separate documents approved for companies should be restricted. The accounting standard of derivative instrument should be released in order to replace the regulations of Circular No. 210/2009/TT-BTC.

### **CONCLUSIONS**

The exchange rate difference information on the financial statements plays an important role in company's operations and has a significant impact on the stock price. Especially, when Vietnam's Stock Market has been growing, investors are more interested in accounting information when making their investment decisions. The results of research are reliable because the data source which is used in the research, is collected from audited financial statements. In addition to the dissertation contributions, the dissertation still has a few limitations:

- The research data is non-financial companies listed on the HNX and HOSE and does not include companies listed on UPCOM.
- The research is not comparable to the impact of the exchange rate difference on the stock price if applying the international accounting standard to applying regulations of Vietnam.
- The author's research model does not mention the macro factors that can affect the stock price

#### **Next research trends**

- Expanding the sample scale to include companies listed on UPCOM. In addition, the companies will be divided into the different industry.
- Future studies can expand the study on the factors affecting the exchange rate differences of the financial companies listed in Vietnam's Stock Market.
- Research on the impact of the exchange rate difference on the stock price of companies listed in Vietnam's Stock Market when applying for the international accounting standard.

Although, the author has a lot of attempts, the thesis has some shortcomings. Looking forward to the recommendations of scientists.

**Respectful Thanks!**

### LIST OF WORKS PUBLISHED BY THE AUTHOR

1. Vu Thi Kim Lan, Dao Dieu Hang, (2013), "Analysis the accounting of property investment in Vietnamese Accounting Standard No 05 (VAS 05), *The Proceedings of Thanglong University - Thanglong University*.
2. Vu Thi Kim Lan, Doan Thi Hong Nhung, (2014), "Some arguments about financial leasing operations", *The Journal of Accounting and Auditing*, No 05 (128).
3. Vu Thi Kim Lan, Doan Thi Hong Nhung, (2014), "The method of assessing the quality of financial statement information of companies", *The Journal of Accounting and Auditing*, No 11 (134).
4. Vu Thi Kim Lan, Doan Thi Hong Nhung, (2015), "Some arguments about the accounting of operations relating to gifting, promoting, advertising and internal consuming of products, goods and services according to the Circular No 200/2014/TT-BTC of Ministry of Finance", *The Proceedings of Thanglong University - Thanglong University*.
5. Vu Thi Kim Lan, Doan Thi Hong Nhung, (2015), "New advantage of accounting for exchange rate according to the Circular No 200/2014/TT-BTC", *The Journal of Accounting and Auditing*, No 12 (147).
6. Vu Thi Kim Lan, (2018), "Some arguments about the relationship between exchange rate differences and stock price", *The National Proceedings: Supporting Vietnamese enterprises to strengthen the ability of credit access through enhancing the management capability and transparency of financial operations*", Thanglong University-Labour and Social Publisher.
7. Vu Thi Kim Lan, (2019), "The situation of the application of accounting policy of the exchange rate differences on financial statement of non-financial joint stock companies listed on Vietnam's Stock Market", *The Journal of Accounting and Auditing*, No 1+2/2019(184).
8. Vu Thi Kim Lan, Chu Thi Thu Thuy, (2019), "The impact of accounting policy on the relationship between the exchange rate differences and stock price", *Review of Finance*, Vol 2 (709).
9. Vu Thi Kim Lan, Chu Thi Thu Thuy, (2019), "The impact of exchange rate differences on financial statements on stock market price: A case of non-financial listed companies", *Review of Finance*, Vol.2, Issue 3, 2019.