THE RELATIONSHIP BETWEEN FIRM PROFITABILITY AND STOCK PRICE: A CASE STUDY OF SET100 LISTED COMPANY IN THE STOCK EXCHANGE OF THAILAND DURING 2014 TO 2016

Wanphat Choksakunphan

A Minor Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration (International Program)

Prince of Songkla University

2018

THE RELATIONSHIP BETWEEN FIRM PROFITABILITY AND STOCK PRICE: A CASE STUDY OF SET100 LISTED COMPANY IN THE STOCK EXCHANGE OF THAILAND DURING 2014 TO 2016

Wanphat Choksakunphan

A Minor Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Business Administration (International Program)

Prince of Songkla University

2017

Title	The relationship between firm profitability and stock price: A case study of SET100 listed company in the stock exchange of Thailand during 2014 to 2016
Author	Miss Wanphat Choksakunphan
Major Program	Business Administration (International Program)

Major Advisor

.....

(Dr. Muttanachai Suttipun)

Examining Committee:

.....Chairperson

(Dr. Muttanachai Suttipun)

.....Committee

(Asst. Prof. Dr. Kulwadee Lim-u-sanno)

..... Committee

(Mr. Nitinan Phramhan)

……

(Asst. Prof. Dr. Suthinee Rurkkhum)

Director of Master of Business Administration

(International Program)

Minor Thesis Title	The relationship between firm profitability and stock price: A case study of SET100 listed company in the stock exchange of Thailand during 2014 to 2016
Author	Miss Wanphat Choksakunphan
Major Program	Business Administration (International Program)
Academic Year	2018

ABSTRACT

The main aim of this study is focused on the ability of the company's financial performance in terms of profitability to predict the future stock return in terms of stock price. To verify the relationship between financial performance and market price of listed companies in the Stock Exchange of Thailand (SET), this study investigated the impact of financial indicators on their stock prices. To be exact, this study investigated the impact of Net Profit Margin (NPM), Price to Earnings Ratio (PE), Earnings per Share (EPS) and Price to Book Value Ratio (PBV) on the Market Price of listed companies in the SET 100 index from 2014 to 2016. This study also controlled for the effect of firm's age, industry type, audit type and ownership status on market price of stock. A total of 62 companies fit the description as companies that were delisted from the index and companies that joined the index in between the year were removed from the sample size. The data were obtained from the SET, the companies' financial reports and the companies' websites. The data were then analyzed using multiple linear regression analysis with the authorized IBM SPSS software application.

The result showed that EPS, NPM, PBV and PE all have positive and significant relationship with the market price with the coefficient of variance (β) of 0.96 (p<.001), 0.14 (p<.001), 0.18 (p<.001), and 0.10 (p<.01) respectively. Among the four control variables, ownership status and industry type both have significant relationship with the market price while the firm age and audit type have no significant relationship with the market price.

ACKNOWLEDGMENT

I would like to express my deepest appreciation to my supervisor and the chairman of my minor thesis committee, Dr. Muttanachai Suttipun, who provided help and support my thesis. He has the attitude and substance of a genius: he continually and convincingly conveyed his guidance to me in regards this research and he is ready and available to teach all the time. Without his guidance and persistent help this thesis would not have been possible.

I would like to also thank the members of my minor thesis committee, Mr. Nitinan Phramhan and Asst.Prof.Dr. Kulwadee Lim-u-sanno, whose work demonstrated to me their support, motivation, patience and suggestions in writing this thesis paper. Their valuable guidance helped me in completing this thesis. Without their support, it would have been impossible to reach the final goal and I cannot imagine having a better Professors and mentor for my study.

I would also like to appreciate the lecturers and the administrative staff of Master in Business Administration International program for their supports throughout my study in PSU and more importantly in the IMBA program.

In conclusion, I recognize that this research would not have been possible without the support and encouragement of my parents and my classmates throughout the time of writing this study.

Wanphat Choksakunphan

CONTENTS

Page

List of Tables

List of Figures

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Currently, there are various options for the customers to choose for saving or investing purpose. For saving purpose, saving bank accounts, treasury notes or money market funds are considered as famous and common choices for customers (Hogarth & Chris, 2003). Meanwhile, for the Investing purpose, invest in the equity funds or invest directly in common stocks are considered as common choices among investors because these investments are likely to generate higher potential returns than other investments. Besides, Investment in special funds like Long Term Fund (LTF) or Retirement Mutual Fund (RMF) provides tax benefits to the investors. Investment in stock also provides dividend for the investors.

In Thailand, investing in the stock market directly is still considered as a popular choice for Thai investors. There are various books available in the book store on stock investing and some of them are considered as best sellers (Lau & Tan, 2003). This explains why the volume of daily trading by retail investors in the Stock Exchange of Thailand is the highest compared to other groups of investors like the institutional investors, foreign investors and propriety investors (Ittner, Larcker & Randall, 2003).

However, as the stock price is likely to randomly change over a period of time, most of the investors like to make a decision for investment based on two methods of forecasting the stock's prices (Arkan, 2016). The first methodology is a 'fundamental analysis' that forecast the stock price based on the existing financial information of the companies. The financial information relating to the stocks comprised of profitability, financial leverage, liquidity, and financial ratios (Ittner et al., 2003). However, the investors have to keep in mind that this forecasting and analysis tend to be on a long-term horizon since most of the information is available on quarterly and yearly basis. The second methodology is 'Technical Analysis', which does not require the financial information of relating companies to the stocks since this analysis is based on the statistics of historical market price (Ittner et al., 2003). In other words, this technique could be used for both long-term and short-term analysis. Consequently, it could be seen that most of the Thai retail investors tend to focus on

technical factors rather than fundamental factors. Also, most of them are likely to lack the proper understanding of how to invest in stocks by using the fundamental analysis technique. Indeed, corporate financial performance can directly reflect the quality of corporate management and operation.

The two methods are likely to use different variables for analysis and for different proposes. Jabbari and Fathi (2014) have been mentioned in their report that mostly the daily trade investors are likely to use the technical analysis rather than the fundamental analysis. In other words, the fundamental analysis is normally used among the investors who would like to invest within a particular security in long-term horizon (Jabbari & Fathi, 2014). Besides, Siqueira, Otuki and Costa (2015) also mentioned in their study that the fundamental analysis is normally used to evaluate security's intrinsic value regarding the business's operation or market. That means the investors who use this method to determine whether to buy or sell security will often use it to know if the investment is worth its value, overpriced or not.

In this report, the author will focus on the investors who trade daily and have based their decisions on the historical data and trends. Therefore, it could be seen that many investors have decided to apply this method as it is easier and more comfortable for them to make a forecast on the stock's performance. Moreover, the previous financial performance of the company has also provided an insight regarding the company's future activities for investors (Jabbari & Fathi, 2014).

1.2 Research Question

Is there relationship between financial performance and market price of listed companies in stock exchange of Thailand?

1.3 Research Objective

To test the relationship between financial performance and market price of listed companies in stock exchange of Thailand.

1.4 Expected Contributions

1.4.1. To guide investors to consider some important financial instruments for decision-making.

1.4.2. To shed light on the relationship between financial performance and market price in difference perspective.

1.4.3. To contribute to the database of economic and financial studies in Thailand.

1.5 Scope of Study

This study will focus on the relationship between market prices of stocks in Stock Exchange of Thailand that are SET100 index series and the companies' financial performance; Net Profit Margin, Price-to-Earnings Ratio, Earnings Per Share, and Price book ratio during 2014-2016. The reason that the author has decided to collect the information from 2014 onwards is that in 2013, the Stock Exchange of Thailand committee imposed the new regulations to monitor the companies those are listed in the Stock Exchange of Thailand (Grant, 2013). To be precise, the Stock Exchange of Thailand decided to implement the new regulations that are attractive to foreign investors thus allowing foreign companies to be listed in the Stock Exchange of Thailand (Grant, 2013). Consequently, the author has decided to study the relationship between the companies' financial performance and the stock price after the change in the regulations.

To be exact, the population of this study is the stocks that are constituents of SET100 across all the periods during January 2014 to December 2016. In this case, SET100 index series are calculated for top 100 stocks as constituents. The criteria for selecting the top stocks for conducting the analysis will be based on the market capitalization, liquidity of the stocks and proportion of free floats. In other words, the population for this analysis will not include the listed stock less than 3 years in SET100.

1.6 Keywords and Definitions

Financial Performance: Financial performance is one of the major characteristics that define competitiveness, potentials of the business, and economic interests of the organization's management and reliability of present or future contractors (Berk & DeMarzo, 2007). It is also defined as level of performance of a business over a specified period of time, expressed in terms of overall profits and losses during that time. Evaluating the financial performance of a business allows decision-makers to judge the results of business strategies and activities in objective monetary terms. (Blackburn, Doran & Shrader 1994).

Market Price: The market price is the stock prices that the author has observed in the financial markets. In this study, the author will later explain in detail how the stock prices are determined; however, up to this point, it would be defined as a company's market price that incorporates the information available to investors. If the market price reflects all relevant information, then the observed price is also the intrinsic or fundamental price. However, investors rarely have all relevant information. To illustrate, companies report most major decisions, but they sometimes withhold selected information to prevent competitors from gaining strategic advantages (Eugene & Michael, 2015).

Stock Exchange of Thailand: The Stock Exchange of Thailand (SET) is the national stock exchange of Thailand. It was established under the Securities Exchange of Thailand Act, B.E. 2517 (1974). Operations started on April 30, 1975 which includes listing securities, supervision of information disclosures by listed companies, oversight of securities trading and monitoring member companies involved in trading securities, as well as dissemination of information and education of investors.

SET100: To accommodate the issuing of index futures and options in the future, and to provide a benchmark of investment in the Stock Exchange of Thailand, the SET50 Index and the SET100 Index were launched. These indices are calculated, respectively, from the stock prices of the top 50 and 100 listed companies on SET in terms of high market capitalization, high liquidity and compliance with requirements regarding the distribution of shares to minor shareholders. The component stocks in the SET50 Index and the SET100 Index are reviewed every six months in order to adjust for any changes that have occurred in

the stock market, such as new listings or public offerings. After review, stocks that meet the necessary qualifications are selected to become part of the SET50 Index or the SET100 Index and others are removed (The Stock Exchange of Thailand, 2017).

CHAPTER 2

LITERATURE REVIEW

Generally, among the investors it has been debated over a decade whether which financial information is likely to have an influence on the stocks' market price (Ștefan, 2016). Consequently, it is no doubt to see that there are various studies conducted by scholars to identify the relationship between the performance of the stocks' price and the capital structures (Anwaar, 2016). In other words, it could be seen that the concern on investment has been spread widely after Ball and Brown (1968) introduced their theories toward this concern. They mentioned that the company's performance is likely to give a positive or negative signs between the current and the future return of the security in the stock market (Ball & Brown, 1968). Esmaeili (2002) also mentioned in her research that the relationship between the financial ratio and the stock prices tend to be significant. In other words, in the investment perspective, it could not be denied that the financial statement is considered as a source of information that allows the investors to have more insight and predict the future performance of the company. That means the financial ratios are also considered as an alternative source for investors to make a decision for investment since it tends to have a largely attributed changes of the stocks' prices (Kohansal, Dadrasmoghadam, Mahjori Karmozdi, & Mohseni, 2013).

Referring to the previous journal written by Hobarth (2016), it mentioned that some financial indicators derived from the company's financial performance is likely to have a relationship with the company's stock prices. However, Fama and French (1993) has stated that the company's size and market risks tend to have no relationship with the security's return in average amount. This chapter provides review of previous studies done by scholars on the relationship between financial performance and market price of stock.

2.1 Financial Performance

The shareholders and management of a company need to know the current performance of their operation and they mostly look at the financial statement to determine

the performance. In other words, most of the companies usually analyse and compare their performances based on their financial ratio against the industry benchmarks as well as their previous performance.

To be precise, comparing their current financial performance with the historical information will allow them to know the development of each part of the operation of the company over time whether it's improved or worsen. It can also be used to know if the current situation of the company is normal or a special situation that needs close attention. Meanwhile, comparing their performance against the industry benchmark seems to be the popular methods for the companies to position their performance in the market against overall competitors. Besides, this technique is likely to lessen the "bias" in the benchmark from small number of outliers in the industry.

As a result, the author would apply the definition of the financial analysis derived from the company's financial performance based on Momani's perspective as a "detailed study of the financial reports in order to identify the strengths and weaknesses of companies in these accounts and diagnose problems in order to find solutions and by studying the historical information to determine past and future Orientalism" (Arkan, 2016).

Therefore, it is no doubt to recognize that the correlation between the financial or account information regarding to the company's performance and the stock price tends to be positive. As Ball and Brown (1968) mentioned in their research that the company's stock prices tend to increase when the company's financial performance has demonstrated that the company has generated excess earnings and the investors have recognized the opportunities to generate abnormal returns from this investment.

2.2 Market Price

Stock Exchange of Thailand (SET) (2013) states that market capitalization is the total market value of a company's listed shares. Commonly referred to as "Market Cap", it is calculated by multiplying the total number of outstanding listed shares by the current market price. Fiscal Policy Office (2004) says that Market Capitalization (Market Cap) is found by multiplying the total number of listed outstanding shares by its current share price.

Leungrungrueng (2008) indicates that Market Capitalization is calculated by the use of the current market price, and it is an index being use to represent the size of the listed share.

Therefore, we can conclude that market capitalization is multiplying the current price of listed stock by the total number of the listed stock. Moreover, the SET establishes the capital market, which is the market for buying and selling equity and long-term debt instruments (more than 1 year). They are fixed deposits, insurance policy, debenture, common stock, and government bond. Capital Market is the source of money that directly link between savers and investors who want to borrow the money or invest in long term. Capital market is a source of investment funds; it lowers the cost for raising funds. It also benefit the economy through efficient resource consumption, increased productivity, increase in employment, better living, better economy and prevents savings from devaluation because of inflation.

Capital market can be classified into two, which are

1. Primary market, which deals with trades of new issues of stocks, such as common stocks, debentures, insurance fund raisings and other securities.
2. Secondary market, which deals with the exchange of existing or previously-issued securities such as the buying and selling in stock.

Stock Exchange is the secondary market, which is for buying and selling public company's long-term securities that were already issued. These securities consist of debt and equity; common stocks, preferred stocks, debenture, investment units, warrants and derivative which are types of investment instruments.

According to the Securities and Exchange Act B.E. 1992 states the main role of the Stock Exchange, as follows

1. The market for trading the securities and improvement of any systems to provide stock trade convenience
2. Performing any business concerning the stock trade such as clearing house, securities depository center, securities registrar.
3. Performing other businesses that are approved by the Securities and Exchange Board.

2.3 Theory

Apart from the external factors that might be able to impact on the company's performance, there are internal factors such as internal conflict that tends to have an influence on a company's performance as well. One of the common internal conflicts is the 'Agency Conflict'.

Agency Theory is a theory that describes a problem in a context of 2 major parties, the principle, which usually refers to shareholders, and the agent, which usually refer to the management. The goal of the theory is to maximize the value of the company. The value of the company can be measured by the value of stock and the enterprise value which can be enhanced through high profitability and efficiency of operations. The values can be reflected in financial reports, annual reports or news and publication relating to the company.

One major assumption of the agency theory is that the principle and the agent have "conflict of interest", that is, the agent, instead of maximizing the value to the principle, maximize the value to the agent itself. This might lead to some behaviour in real life, such as; management might adjust the financial accounting reports to get maximum compensation.

Jensen (1986) explained the Agency Theory with the project choice decision by the management. Management tend to select project that generate the free cash flow within the timeline of their term in office and ignore the project that do not generate the required free cash flow during their term even if the project is more profitable in the long term. Another possible behaviour is that the management will make decisions to operate projects with low risk only, which might not maximize the value to the company because the management usually receives fixed salary and the management don't benefit from the excess values of projects with more risks. In case of the company having too much free cash flow, the management might use the cash flow for personal benefits instead. This prevents the company to invest in projects with maximum Net Present Value (NPV) to the company.

According to Burrough and Helyar (1990), another agency problem that may occur is that management of the company referred to as the agent may spend excessively the company's money on personal comfort like luxury office sites, equipment and personal consumptions at the expense of the shareholders' interest. This excess spending will reduce the profitability of the company and eventually the dividend paid out to shareholders.

Another agency problem can linked to reinvestment of free cash flow. In his cash flow framework, Jensen (1986) analysed the behaviour of management in reinvesting free cash flow. He concluded that managers reinvest free cash flow to expand the company size for their own benefit instead of distributing the free cash flow to the shareholders. Johnson, La Porta, Lopez-de-Silanes and Shleifer (2000) also claimed that managers could take advantage of the firm's resources because of the level of control they have on the firm's resources.

As the principle and the agent have a conflict of interests, each party tend to maximize the value for them and not for the other, this will incur the "agency costs". While shareholders have no information on how the management make decisions, the company must bear the cost of auditing to prevent actions from management that would harm the shareholders and the cost to motivate the management to create values to shareholders. In order words, agency cost refers to the cost of preventing agency problem, cost of investigating and selecting appropriate agents, gaining information to set performance standards and monitoring agents (Chen, 2010).

One of the proposed solutions to the agency problem by agency theory is the separation of ownership and control through strict corporate governance measure (Dobson & Sabino, 2004). Another way that principal can manage agency problem is by setting performance target for management and apply reward and punishment. Padilla (2002) stated that the principal must induce the agent to take the most appropriate action that will maximize their expected utility. To do so, the principal must create a contract that balances incentives and risk sharing as well as rewards and punishments. The basic idea is to reward the agent when the desired outcome achieved and penalize them if the desired outcome is not achieved (Kreps, 1990). One of the targets may be to set the level of profitability that the shareholders expect for management to achieve. The major task however, is to find the most efficient ways to align the interest of the management and the shareholders (Jensen & Meckling, 1976).

Although the agency theory is not without criticism, the benefits are numerous. One of the benefits of agency theory is that it has led to various researches on how to align the interest of both the managers and the shareholders. The agency theory has been followed by several country legislations on corporate governance and monitoring of public companies to

protect the mass public shareholders. According to Chen (2010), the development of agency theory has led to the introduction of performance incentive plans for managers of firms which is often referred to as pay for performance.

2.4 Literature review

The financial ratios are the indicators used to determine the companies' performance compared with the other companies. Therefore, the financial ratio seems to be an essential tool for the investors to evaluate whether they should invest or not (Arkan, 2016). The financial ratio could be used to reflect the company's performance in different perspective by owner, manager, stakeholders, or creditors (Salmi & Martikainen, 1994; Aktaş & Seyfettin, 2015). Besides, Taschawin O-jararasporn (2008) mentioned in his study towards the relationship between financial performance and market price of commercial banks in The Stock Exchange of Thailand during 1st quarter of 2004 to 4th quarter of 2007 that there is significance relationship between financial performance and market price. Nevertheless, it could not be denied that the financial ratios seem to be varied across industry since each industry tends to have different benchmarks that reflect to the nature of each industry. Moreover, there are some limitations regarding to use the financial ratio as this financial ratio could be used to compare the financial performance within the industry and not applicable for the across industry (McDonald & Morris 1984; McDonald & Morris 1985). The author has decided to use the Net Profit Margin, Price-to-Earnings Ratio, Earnings per Share ratio, and Price Book Ratio because these variables are commonly used among the investors to make a consideration. Consequently, the author strongly believes that using these four variables in this study will provide benefit to the audience as well as investors.

Investors know that Net Profit Margin is a financial ratio regarding both the concept of profitability ratio and performance of the company. So for this reason, the net profit margin would normally be a guideline for investors to determine the attractiveness of the investment (Arkan, 2016).

The price-to-earnings ratio and price-to-book ratio are considered quite strong when it comes to assisting the investors to forecast the performance of the firm regarding residual income (Gottwald, 2012). Each year when a company makes profit, some of the profit is

given out to shareholders as dividend while the rest is retained and recorded as retained earnings. The retained earnings are part of the equity and if the company gains more book value, it should grow.

Correspondingly, earnings per share is contemplated as one of the other choices of an indicator regarding financial or financial ratios that investors would regularly use to point out the performance of the company when compared to other companies in an industry of the same fields (Gottwald, 2012). On the other hand, this particular ratio can be used to compare company's performance with the industry's benchmark (Arkan, 2016).

2.4.1 Net Profit Margin

Net Profit Margin is likely to say that the company tends to have a unique advantage or comparative advantage over the other competitors when their Net Profit Margin is higher. Meanwhile, the higher net profit margin also means the company tends to have the higher profitability (Dita & Murtaqi, 2014).

According to the previous studies and researches conducted by scholars, it has clearly demonstrated that the net profit margin has a positive relationship or positive correlation as well as has a significant influence on a stock's price (Dita & Murtaqi, 2014). Meanwhile, Jabbari and Fathi (2014) also mentioned in their study that Net Profit Margin is considered as one of the financial ratios along with the Return on Asset or (ROA) that has the highest influence on a stock's return or stock's price.

2.4.2 Price-to-Earnings Ratio (P/E Ratio)

Price-to-Earnings Ratio or P/E is considered as one of the common financial ratios that the investors commonly use to conduct financial analysis. As mentioned earlier that the Price-to-Earnings Ratio is considered as one of the financial ratios that demonstrate or signal the profitability of the company (Gottwald, 2012). As the price-to-earnings ratio is likely to have a strong relationship with the price-to-book value ratio or PBV[1] in terms of assisting the

[1]Price-to-Book value or PBV, which is considered as one of the value ratio that can demonstrate or reflect the company's evoluation of the company's share on the stock's price.

investors to predict the company's performance (Gottwald, 2012). To illustrate, a high P/E means the investors tend to expect the future earnings to grow and vice versa. Consequently, it is no doubt to recognize that the investors commonly use to Price-to-Earnings ratio to analyze the price for the stock for the initial public offering (IPO), intrinsic value of the stock or relative value of the company's stock price when compared with others (Gottwald, 2012). To illustrate, Karan (1996) stated that long term investment strategy that is based on low PE ratios is more successful than long term investment based on EPS and PBV. In other word, when investors make long term investment decision based on low PE they are able to get more return than when they make the investment decision based on EPS and PBV. With these reasons along with his test, Petcharabul and Romprasert(2014) mentioned in his study that Price-to-Earnings Ratio is likely to have a significant relationship with a stock's return.

Nevertheless some scholars have argued that Price-to-Earnings ratio is less likely to have a significant influence on the stock's price (Basu, 1997). To be precise, research by Duangkamol (2016) mentioned that the study of fifty three different companies that operate in the real estate industry and listed in the Stock Exchange of Thailand (SET) during 2012-2014 has demonstrated that there was no relationship between P/E ratio and market capitalization. Indeed, Nargelecekenler (2011) mentioned in his study that the Price-to-Earnings ratio seems to be effective and efficient in some particular industries not all industry. In other words, the P/E does not have a significant influence on a stock's price in all industries or sectors.

2.4.3 Earnings per Share Ratio (EPS)

Accordingly, Earnings per Share is considered as one of the alternative financial indicators or financial ratios that investors commonly used to determine the company's performance compared with the companies that operate within a particular industry (Gottwald, 2012). Gottwald (2012)'s research also mentioned that the Earning Per Share is likely to be a variable that has a strong relationship or linkage with the stock's price.A study of Suntornburut (2002), demonstrated that among the companies that operate in the telecommunication sector in the Stock Exchange of Thailand during 1999-2000, it is likely to find that Earning per Share (EPS) has a significant positive relationship with market price.

Meanwhile, Chang, Chen, Su, and Chang (2008) also supported this statement as mentioned in their study that the Earning per Share has a significant relationship and influence on a stock return in the long run as it tends to be a variable that is able to determine the stock's price of different sectors.

On the other hand, Ocharatporn (2008) studied the relationship between financial ratio of commercial banks and common share price from operational data and retroactive average close price of eleven stocks in each quarter of the commercial banks registered in the Stock Exchange of Thailand, from the first quarter of 2004 to the fourth quarter of 2007, by Regression Analysis. He mentioned that there was no consistent relationship between Earnings per Share (EPS) and the stock's price. Wang, Fu, and Luo (2013) also supported Ocharatporn as they mentioned that from study of the relationship between market price and eight financial ratios for stocks of sixty listed companies in Shanghai Stock Exchange during 2010-2011. The study found no relationship between earning per share (EPS) and market price. The is also similar to the research conducted by Seangsanon (2005) who studied the relationship between financial ratios and market price of stocks in energy sector in Stock Exchange of Thailand during 2002-2003.

2.4.4 Price Book Ratio (PB Ratio)

The Price to Book ratio or PB ratio is a financial ratio to compare the market value against the book value (Libby, Libby, Phillips, Whitecotton, and Cory, 2010). In other words, this ratio assists the investors to know how much extra they are willing to pay for each dollar of equity. However, this ratio's benchmark is likely to vary from one industry to another since there is difference in the nature of the industry (Arkan, 2016).

Many scholars have mentioned in their studies that the Price-Book value tends to have a negative relationship with the company's return on equity (ROE) as well as the price-to-earnings ratio (P/E ratio) (Ştefan, 2016). Ştefan (2016) made further explanation that the Price Book ratio only reflects the future return on equity. According to Aras and Yilmaz, (2008), Price to Book ratio could show significant result in predicting the future gains on stock for one year period in an emerging market. Besides, Bullings and Morton (2001) also

mentioned that the PB ratio is likely to be biased ratio as well as considered as a delayed recognition component.

According to the previous discussion, it could be concluded that the financial ratios could be and could not be used as a financial indicators for forecasting the future stock's prices. However, Foye (2013) has drawn an interesting fact that in some environments the technical methodologies or using the financial statement as source of information for forecasting tend to be useless. To be exact, based on the efficient market hypothesis, it could be seen that the technical analysis would not be able to reflect the stock price under the weak form and semi-strong form efficiency of the market (Foye, 2013). Moreso, there are other factors that are external factors comprising of news or announcement that are able to influence the stock's prices. To be exact, Aktas and Seyfettin (2015) mentioned in their research that in the weak-form efficiency of the market where the public information is reflected to the security's price, this analysis seems to be an inefficiency methodology for the investors. Accordingly, there are alternatives options or methodologies for the investors to diversify their portfolio comprising of Asset Pricing Method.

2.4.5 Control Variables

From the literary review, researchers had determined the control variable which consists of firm age, industry type, audit type, ownership status in order to become the controller of this research. In order to prevent the alteration of the answers regarding the independent variable and the dependent variable .As well as trying to structure the results of the research so that it obtains the value of the relationship of the independent variable (net profit margin, price to earnings ratio (P/E ratio), earning per share ratio (EPS), price book ratio (PB ratio)) and the dependent variable (market price) in a suitable direction (Arkan, 2016)

2.4.5.1 Audit Type

The type of auditor of the company’s financial statement can influence investors’ sentiment and eventually the stock price. According to Joshi and Gao (2009), the big four

audit firms which are Delliote & Touche, Ernst & Young, KPMG and PricewaterhouseCoopers (PwC) are generally perceived by investors to provide more independent auditing service and adhere strictly to audit standards than other audit firms. This is because the big four audit firm has more to lose if the audit is poorly done with their reputation and goodwill at stake. Also companies expecting monitoring and gains from external stakeholders are required to have high level of public disclosure in their financial report and are likely to use the big four audit firms (Suttipun, 2012). However, Suttipun (2012) found out that companies that use these big four audit firms do not necessarily disclose more than those that use other audit firms in Thailand.

2.4.5.2 Firm Age

The age of the firm which is described as the year since the company starts operations is likely to influence its stock price. Baker and Wurgler (2006) stated that investors generally expect better future returns from older firms than younger firms. This is because older firms are perceived by investors to have gained the experience in the industry and likely to be more sustainable than younger firms. This perception creates investors positive sentiments toward older firms stock and this drives the stock price of older firms upward. Baker and Wurgler (2006) further explained that the firm age sentiment can also explain some of the difference in pricing between initial public offer (IPO) and non-initial public offer (NIPO).

Barry and Brown (1985) also stated that older firms have long history and more information available to the market. Investors are able to access this long history of information and this makes the stock returns of older firms more predictable (Zhang, 2006) and reduces the fear of uncertainty by investors causing investors to expect lower risk premium from older companies. This lower risk attributed to older companies when compared to the younger companies in the same industry makes the stock price of the older companies to be higher than the younger ones in the same industry.

2.4.5.3 Ownership Status

Generally, the ownership status of listed companies are classified into two groups namely; government owned (also known as state owned enterprises in some literatures) and private owned. Any company where government organization owns more than 51 percent of the common stocks is classified as government owned while any company where 51 percent of its common stocks is privately held is classified as private company (Suttipun, 2012). The ownership status can affect the stock valuation of the company. For instance, Ang and Ding (2006) reported that government linked companies in Singapore have better valuation than those without government link. This is because they are perceived to have better corporate governance and could receive ball out from government if distressed.

2.4.5.4 Industry Type

Companies in the same industry have similar operations and activities and differ from companies in other industries. Due to the similarity in operation, companies in the same industry often have comparable stock prices because their profitability can be compared to one another or industry average. For instance the stock prices of companies in the oil and gas industry will be different from those in the retail consumer goods industry. Piotroski and Roulstone (2004) argued that the stock price reflect industry specific information. This is in line with the efficient market hypothesis. Also companies in the same industry are often affected by the same external threats or opportunities which often affect the stock price.

2.5 Framework of the Study

From the main objective of relationship between financial performance and market price, this study provides the framework of study as follow:

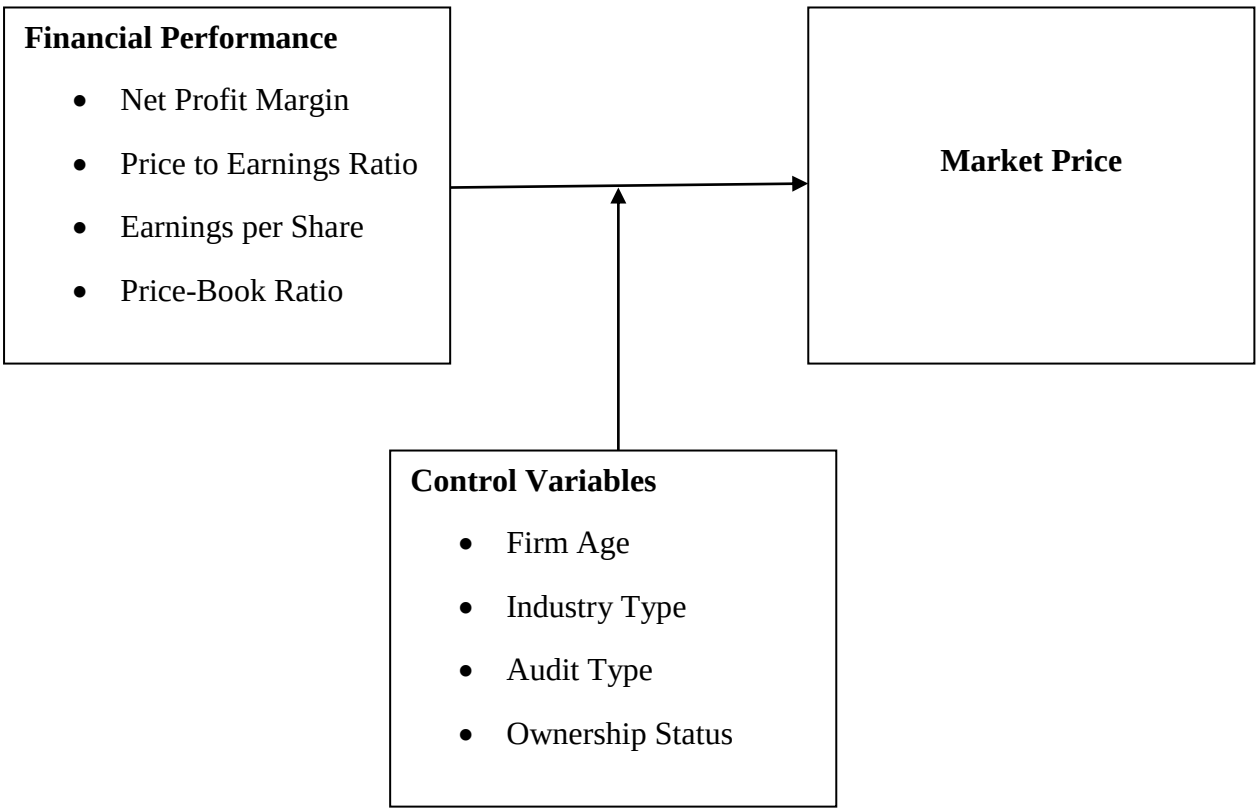

Figure 2.1: Framework of study

CHAPTER 3

METHODOLOGY

This section will introduce the methodology that the author used to verify and examine the relationship between the financial indicators derived from the company's financial performance and its stock prices in the security market.

3.1 Description of the study

This study examines the impact or influence of financial variables regarding to the company's performance have on the stock's price or the security return of the listed company on SET 100 index of Stock Exchange of Thailand, over 2014-2016. This study contains one dependent variable; stock prices, and four independent variables which are Net Profit Margin, Price-to-Earnings Ratio, Earning per Share, and Price Book ratio.

3.2 Hypothesis development

3.2.1Net Profit Margin

The first independent variable is Net Profit Margin, which is the percentage of the company's earnings after tax and interest to the company's revenues (Gottwald, 2012). Accordingly, it could be implied that this ratio is likely to demonstrate how much the company has earned from its profit. As the previous section has been mentioned the Net Profit Margin tends to have a positive relationship with stock prices (Arkan, 2016; Dita & Murtaqi, 2014; Jabbari &Fathi, 2014). Therefore, the author verifies the following hypothesis

H_1 : There is a relationship between Net Profit Margin and Stock Price

3.2.2 Price-to-Earnings Ratio (P/E Ratio)

As the previous chapter has explained that many researchers have discussed and argued on the context of whether the price-to-earnings ratio has an influence on a stock's price or stock's return or not (Basu, 1997; Karan, 1996; Nargelecekenler 2011; Gottwald, 2012; Petcharabul & Romprasert, 2014; Duangkamol, 2016). The author verifies the relationship of this variable and the stock prices by using the hypothesis as follows:

H_2 : There is a relationship between Price-to-Earnings Ratio and Stock Price

3.2.3Earnings per Share Ratio (EPS Ratio)

According to the discussing regarding Earning per Share in the chapter 2, it could be seen that there are slightly some inconsistent in the findings of relationship between earning per share (EPS) and stock price (Suthornborros, 2002; Seangsanon, 2005; Chang et. al., 2008; Ocharatporn, 2008; Gottwald, 2012; Wang et. al., 2013). Therefore, the author verifies the relationship of this variable and the stock price by using the hypothesis as follows:

H_3 : There is a relationship between Earnings Per Share (EPS) and Stock Price

3.2.4 Price Book Ratio

The last independent variable for this study is the Price Book Ratio. This ratio has been commonly used as a financial indicator that determine the worth of the investor's equity investment against its market price

As it could be seen from the previous chapter that researchers have concluded that the result of the impact of the price-book ratio on the stock's price could vary in different ways. Some concluded that price to book ratio have a negative relationship with the stock's price and other major variables which include Price-Earnings Ratio and Return on Equity while others concluded it has a positive relationship with the stock’s price (Bullings & Morton, 2001; Foye, 2013; Aktas & Unam, 2015; Arkan, 2016; Stefan, 2016). To verify its influence and relationship on the stock price of companies in SET 100 index on Stock Exchange of Thailand, the author used the hypothesis as followed:

H_4 : There is a relationship between Price Book Ratio and Stock Price

3.3 Sample Set and Data Collection Methods

This study mainly used the secondary data to identify the sample set or sample population. This set of the secondary data was used to verify and examine the influence of the company's performance on the securities' return. For this study, the sample size was the top 62 companies that are listed in the SET 100 Index of Stock Exchange of Thailand. The panel of the secondary data was collected from the official Website of Stock Exchange of Thailand and Aspen for browser, a stock chart program for collecting the data over the 3 years period; 2014 to 2016 in order to ascertain the relationship between the company's financial performance and its stock's price.

In this study, the constituents of SET100 were selected anew every 6 months. There are 2 times of review every year. The first time is June Review which the result will take effect in the index between July-December of that year. The second time is December Review which the result will take effect in the index between January – June of the next year.

During the time horizon of our study, there will be 6 revisions of SET100

1. January – June 2014 (2014H1)
2. July – December 2014 (2014H2)
3. January – June 2015 (2015H1)
4. July – December 2015 (2015H2)
5. January – June 2016 (2016H1)
6. July – December 2016 (2016H2)

Data of the independent variables was sourced from the financial report of the selected companies and the dependent variables from the Stock Exchange of Thailand as at31st of December between 2014- 2016. After the information and data has been collected, the author then used this raw data to input in a program called Statistical Package for Social Sciences (SPSS) to conduct the analysis based on the quantitative analysis consisting of descriptive statistics and analytical statistic. In other words, this analytical statistics used was multiple regressions.

Meanwhile, the descriptive statistics is used to investigate independent variables within the sample population. In this case, the author used mean, percentage and standard deviation to describe the sample population for this study, and the multiple regressions was used to verify and evaluate the relationship between independent variables and the dependent variable.

3.4 Variable measurement

In this section, the author introduces briefly the information about the variables that were used as well as the hypotheses that were verified in the later section.

3.4.1 Dependent Variable

The dependent variable is a variable that derives its value from the other variables that are independent variables. In this research, the author used the Stock Price as a dependent variable for this study.

3.4.2 Independent Variables

This study consists of four different independent variables that are Net Profit Margin, Price-to-Earnings Ratio (P/E Ratio), Earning per Share ratio (EPS), and Price book ratio (PB).

3.4.2.1 Net Profit Margin

The equation to calculate the Net Profit Margin is as given below:

$$Net\ Profit\ Margin = \frac{Net\ Profit}{Revenue}$$

3.4.2.2 Price-to-Earnings Ratio (P/E Ratio)

The second financial ratio for this study is Price-to-Earnings Ratio or (P/E Ratio), which is calculated by using the formula below:

$$Price - to - Earning\ Ratio = \frac{Stock\ Price}{Earning\ per\ Share}$$

3.4.2.3 Earning per Share Ratio (EPS Ratio)

The next financial ratio for this study is earnings per Share Ratio or EPS ratio, which is

$$Earning\ Per\ Share = \frac{Net\ Income - Dividend\ on\ Preferred\ Stock}{Average\ Outstanding\ Shares}$$

3.4.2.4 Price Book Ratio (PB Ratio)

The equation to calculate the Price-Book Ratio is as given below:

$$Price\ Book\ Ratio = \frac{Market\ Price\ per\ Share}{Book\ Value\ per\ Share}$$

3.5 Data Analysis

In this section, the regression analysis will assist the audience to have more understanding on how the independent variables influence the dependent variable in the equation form. This study used multiple regression equation as follows:

3.5.1 Financial Ratios Regression Equation

$MP = \beta_0 + \beta_1 (NPM) + \beta_2 (P/E) + \beta_3 (EPS) + \beta_4 (P/BV) + \beta_5 (FA) + \beta_6 (IT) + \beta_7 (AT) + \beta_8 (OS) + e$

Where;

MP = Market Price of Stock

NPM = Net Profit Margin

P/E = Price-to-Earnings Ratio

EPS = Earnings per Share Ratio

P/BV = Price to book value

FA = Firm age

IT = Industry type

AT = Audit type

OS = Ownership status

CHAPTER 4

RESULTS

In this chapter, the author presents result on the analysis of the relationship between the financial performance and market price using a case study of listed firms in Stock Exchange of Thailand from the year 2014 to year 2016. To proxy for the financial performance, this research used profitability ratio (Net Profit Margin) and market value ratio (Price to Earnings ratio, Earnings per Share, and Price-Book ratio) and controlled for firm age, industry type, audit- type and ownership status. Using secondary data from SET, the sample size was narrowed to 62 firms which are firms that maintained presence in the SET 100 index from 2014 to 2016. The companies that joined the index in between the years and the companies there were delisted from the index in between the years were not included in the sample used for analysis. The secondary data was obtained from the authorized website of SET and the Aspen browser. The Aspen browser is a computer program or application that pools together data on stocks over the years and present the stocks' charts. It is commonly used by stock brokers in Thailand. This was used to verify our data and the comparison between the two sources of the secondary data shows that the data is the same and can be trusted. The result of this analysis is therefore presented below and compared with other empirical studies.

4.1 Industrial Classification of the Sample

Following the SET classification of industry, this research classifies the industry for the sample of listed companies in SET 100 index used as shown in the Table 4.1 below. Some of the companies have diversified into other industries but were classified based on the core activity of the companies. The core activities of the companies were obtained from the companies' website and they are the activities that form the largest percentage of revenue for the companies. The companies are classified into seven industrial groups as shown in the table below.

Table 4.1: General information of companies registered in Thailand's SET 100

Classification	**Description**	**Frequency**	**Percentage**
Industrial Groups	Agriculture and Food	2	3.23%
	Financials	8	12.90%
	Industrials	2	3.23%
	Property and Constructions	16	25.81%
	Resources	12	19.35%
	Services	13	20.97%
	Technology	9	14.52%
Types of Auditors	Big 4	53	85.48%
	Non Big 4	9	14.52%
Ownership Status	Government	14	22.58%
	Public	48	77.42%
Firm Age	5 - 10 years	3	4.84%
	11- 20 years	5	8.06%
	21-30 years	17	27.42%
	31 - 40 years	22	35.48%
	41- 50 years	6	9.68%
	Above 50 years	9	14.52%

According to table 4.1, in terms of industrial classification, majority of the sample companies are in the property and construction sector which forms about 26% of the sample. This is followed by the Services sector and Resources sector which are about 21% and about 20% respectively. Technology industry accounts for about 15% of the sampled companies while financial industry accounts for about 13%. The Agriculture and Food industry and the

Industrial industry each account for 3.23%. About 86% of the companies sampled were audited by the Big 4 auditors which are; KPMP, PwC, Delliotte and Ernst and Young. The remaining companies were audited by other accredited auditors. Out of the sampled companies, about 23% of them are state owned enterprises while the 77% are public owned. Majority of the sample companies have been operating for 31 to 40 years as this group forms the highest percentage of 35.48% of the companies. This is followed by companies that have been operating for 21 to 30 years which make up 27.42% of the sample companies. 14.52% of the sampled companies have been operating for more than 51 years. 9.68%, 8.06% and 4.84% of the companies in the sample have been operating for 41 to 50 years, 11 to 20 years and 5 to 10 years respectively.

4.2 Mean, Standard Deviation and Correlation of Variables.

The mean and standard deviation of the dependent and independent variables are as shown in the Table 4.2 below. The variables that are nominal in scale are not included in this descriptive analysis.

Table 4.2: The descriptive analysis

Variables	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**
Net Profit Margin	-52.24	58.41	14.54	14.08
Price-to-Earnings Ratio	4.64	4980.12	61.77	406.10
Earnings per Share Ratio	-8.24	46.74	3.80	6.81
Price Book Ratio	0.42	19.96	3.32	3.46
Firm Age	5	74	34.82	14.56
Market Price	1.44	496	59.68	88.83

Table 4.2 shows that in terms of market price, the company with the least market price in the sample has a mar ket price of 1.44 Baht and the company with the hghest market price has the stock price of 496 Baht. The average market price for the sample companies is about sixty baht per share with standard deviation (SD) of 88.83. The minimum net profit margin for the sample companies is -52.24 this is because some companies declared loss at some particular year while the highest NPM is 58.41. The average NPM for the sample is 14.54 with the standard deviation of 14.08. The minimum PE ratio for the sample is 4.64 and the maximum PE ratio is 4980.12. This is excessively high and it is because the company with the PE ratio of 4980.12 had a loss in the year and a negative earnings per share whichh then make the PE ratio to be very high. The earnings per share for the sample range between lowest of -8.24 and the highest of 46.74. The mean and the standard deviation of the earnings per share is 3.80 (SD = 6.81). The price book ratio ranges between 0.42 lowest to19.96 highest and the mean and standard deviation is 3.32 (SD = 3.46). The youngest company in terms of year of operation has operated for 5 years as at the time of this study while the oldest has operated for 74 years. The average age of the sample companies is about 35 years (SD=14.56).

Table 4.3: Pearson Correlation of each variable

Variables	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
EPS (**1**)	1								
NPM (**2**)	0.35***	1							
PBV (**3**)	-0.02	0.27***	1						
PE (**4**)	-0.33***	-0.15*	0.38***	1					
Audit Type (**5**)	0.19**	0.07	0.07	0.05	1				
Ownership Status (**6**)	-0.17*	0.10	0.28***	0.22**	0.22**	1			
Firm Age (**7**)	0.14*	-0.02	-0.13*	0.0003	-0.22**	-0.03	1		
Industry Type (**8**)	-0.29***	-0.001	0.43***	0.33***	0.02	0.21**	-0.25***	1	
Market Price (**9**)	0.87***	0.22**	0.17*	-0.12	0.13*	-0.19**	0.13*	-0.10	1

Significant at ***$p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table 4.3 presents the Pearson correlation of the variables used in this research. The NPM is positively correlated with EPS with correlation coefficient (*r*) of 0.35 (p< .001). This means that NPM and EPS tend to move together in the same direction. This also means that when NPM increases, EPS also increases and when NPM decreases, EPS also decreases. This is because net profit directly affects both NPM and EPS as it is used in the calculation. The PBV is positively correlated with NPM with the correlation coefficient (*r*) of 0.27 (p< .001). The PE ratio is positively correlated with PBV with the correlation coefficient (*r*) of 0.38 (p< .001) while it is negatively correlated with EPS and NPM with the correlation coefficient (*r*) of -0.33 (p< .001) and (*r*) of -0.15 (p< .05) respectively. The Audit type is positively correlated with only EPS with the correlation coefficient (*r*) of 0.19 (p< .01). This means that when companies are audited by non-Big 4 auditors, they tend to report higher EPS. The ownership status is negatively correlated with EPS with the correlation coefficient (*r*) of -0.17 (p< .05). This means that companies that are government owned report higher EPS than the public owned companies. The ownership status is however positively correlated with PBV, PE and Audit type with the correlation coefficient (*r*) of 0.28 (p< .001), (*r*) of 0.22 (p< .01) and (*r*) of 0.22 (p< .01) respectively. This means that public owned companies tend to report higher PBV and PE and they are more likely to use the big 4 auditors. The firm age is positively correlated with EPS with the correlation coefficient (*r*) of 0.14 (p< .05) and negatively correlated with Audit type with the correlation coefficient (*r*) of -0.22 (p< .01). The industry type is positively correlated with PBV, PE and ownership status with the correlation coefficient (*r*) of 0.43 (p< .001), (*r*) of 0.33 (p< .001) and (*r*) of 0.21 (p< .01) respectively and negatively correlated with EPS and firm age with the correlation coefficient (*r*) of -0.29 (p< .001) and (*r*) of -0.25 (p< .001) respectively.

There is no sign of multicollinearity among the independent variables. Drury (2008) documented that if the correlation between two independent variables is 70% and above, then it is a case of concern for multiple regression analysis. However, in this research, the highest correlation between the independent variables is 43% between Industry type and price book ratio. The VIF test for multicollinearity was also conducted as presented in Table 4.6 the result gives a mean VIF of 1.25 which is very small (less than 10, the rule of thumb). Hence, the data satisfy the assumption of no multicollinearity for a multiple regression

analysis. The data was also tested for linearity, normality and homoscedasticity and passed all the assumptions before proceeding to multiple regression analysis.

4.3 Regression Result

To analyse the relationship between firm profitability and market price of its shares, this research used the regression equation below:

$$MP = \beta_0 + \beta_1 (NPM) + \beta_2 (P/E) + \beta_3 (EPS) + \beta_4 (P/BV) + \beta_5 (FA) + \beta_6 (IT) + \beta_7 (AT) + \beta_8 (OS) + e$$

The market price (MP) is regressed on the Net Profit Margin (NPM), Price to Earnings ratio (P/E), Earnings per Share (EPS), Price Book ratio (PBV) and control variables (firms' age, industry type, audit type and ownership structure).

Table 4.4: Regression Analysis

Variables	**Standardized regression coefficients**	***t***	**VIF**	**Tolerance**
EPS	0.96***	24.15	1.51	0.66
NPM	0.14***	3.64	1.31	0.77
PBV	0.18***	4.42	1.58	0.63
PE	0.10**	2.64	1.44	0.70
Audit Type	-0.03	-0.94	1.21	0.83
Ownership Status	-0.10**	-2.85	1.22	0.82
Firm Age	0.04	0.98	1.18	0.85
Industry Type	0.09*	2.43	1.43	0.70
R^2	0.83			
F	98.50***			

Significant at ***$p < 0.001$, **$p < 0.01$, *$p < 0.05$

The regression result shows that the coefficient of variation (β) for all the independent variables EPS, NPM, PBV and PE are positive and statistically significant. The coefficient and p-value for EPS, NPM, PBV and PE are 0.96(p<.001), 0.14(p<.001), 0.18(p<.001) and 0.10(p<.01) respectively. EPS has the strongest effect on market price followed by PBV then NPM and lastly PE. Out of the control variables, only ownership status and industry type have an effect of market price with the coefficient of variation (β) of -0.10(p<.01) and 0.09 (p<.05) respectively. These variables are able to predict 83% of the changes in market price.

This shows that market value of shares is significantly and positively affected by high earnings per share, net profit margin, price-book ratio and price earnings ratio. This is similar to the findings of Chang, Chang, Chen and Su (2008) which employed panel data to analyse the relationship between stock prices in Taiwan stock market and earnings-per-share. They found out that EPS has a significant relationship with share price in Taiwan stock market. Srinivasan (2012) further confirms that EPS is a significant determinant of share price in India stock market. Sharif et. al., (2015) also found out that in Bahrain stock market, price to book value is a significant determinant of share price. Dita and Murtaqi (2014) also confirmed that net profit margin is a significant determinant of stock price in Indonesia consumer goods industry. Irfan, Nishat and Sharif (2002), Khan, Ikram and Mehtab (2011) and Okafor and Mgbame (2011) all presented a significant impact of PE on market price of shares

Summary of Hypothesis Test

H1: There's a relationship between Net Profit Margin and Stock Price. From the regression result there is a positive significant relationship between net profit margin and stock price of companies listed in the Stock Exchange of Thailand (SET 100 Index) between the years 2014 to 2016. This research therefore accepts the hypothesis H1.

H2: There's a relationship between Price-to-Earnings Ratio and Stock Price. The regression result shows that PE ratio has no significant relationship with stock price of the listed companies in SET 100 index between the years 2014 to 2016. This research therefore accepts hypothesis H2.

H3: There's a relationship between Earnings per Share (EPS) and Stock Price. The result shows that EPS has a significant effect on stock price of the listed companies in SET 100 index between the years 2014 to 2016. Therefore, this study accepts hypothesis H3.

H4: There's a relationship between Price Book Ratio and Stock Price. According to the regression result, the effect of price to book ratio on the stock price of the listed companies in SET 100 index between the years 2014 to 2016 is statistically significant. Therefore, this study accepts hypothesis H4.

CHAPTER 5

DISCUSSION

5.1 Conclusion

The main aim of this study was to examine the relationship between financial performance and stock price of companies listed in the Stock Exchange of Thailand between the years 2014 to 2016. The secondary data 62 companies used for analysis was obtained from the authorized website of the Stock Exchange of Thailand and confirmed with Aspen software application. The sample companies were those companies that were listed in the SET 100 index from year 2014 to 2016. The companies that joined the SET 100 index in between the years or delisted in between the years were not included in the analysis. This study mainly tried to examine the relationship between earnings per share, net profit margin, price book ratio, price per earnings ratio and market price of stock. These variables were analyzed by multiple regression analysis using the IBM SPSS software. The control variables used in this study were Audit type (whether the company was audited by the Big 4 or not), Ownership Status (whether the company is owned by the government or not), firm age and the operating industry of the company. The result showed that all the independent variables namely; EPS, NPM, PBV and PE ratio have positive and significant effect on market price of stocks for the companies listed in the Stock Exchange of Thailand during the year 2014 to 2016. The results are further discussed in the next section.

5.2 Discussions

5.2.1 Earnings per Share and Market price

The result of the multiple regression shows that earnings per share has a positive and significant effect on market price of the stock of companies listed in the Stock Exhange of Thailand during 2014 to 2016. This shows that increase in EPS will lead to increase in the market price of stock. This is consistent with the findings of Chang et al., (2008) and Gottwald (2012). Suntornburut (2002) also found the same result in her study of telecommunication companies in Thailand listed in the SET from 1999 to 2000. She stated that investors in the telecommunication companies often use the EPS as an optimistic

connection with the market price. The result of this study also points to the category of investors in the Stock Exchange of Thailand. It shows that when EPS increases, investors are not in a hurry to sell the stock after receiving the dividends as this will bring down the market price of the stock due to increased supply of the stock in the market but the investors rather hold on to the stock. This shows that investors in the SET are long term investors rather than short term investors.

5.2.2 Net Profit Margin and Market Price

The result of the multiple regression shows that the NPM has a positive and significant effect on the market price of stocks of the listed companies in the SET during the year 2014 to 2016. This shows that when these companies increase their profitability in the form of net profit, the market price of their shares also increases. This is consistent with the findings of Anwaar (2016) and Dita and Murtaqi (2014). The reason for this kind of relationship according to Anwaar (2016) is that when the net profit margin increases, the company is able to retain more cash which will increase the value of the company and hence the stock price too will increase. Also the company with increase net profit margin could buyback it shares or pay higher dividend. Investors are generally interested in companies are profitable and that pay higher dividend and thus this will make more investors willing to buy the shares of the company. Also if the company buyback it shares, it will reduce the supply of the shares in the market and based on the theory of demand and supply this decision will drive up the market price of the shares.

5.2.3 Price to Book Value and Market Price

Based on the result from the multiple regression analysis, PBV has a positive and significant effect on the market price of stock for the companies listed in the SET during 2014 to 2016. This means that as the PBV increases, the market price of stock for these companies also increases. This finding is consistent with the result of Srinivasan (2012) and Stefan (2016). Stefan (2016) stated that the PBV can indicate future equity return. The relationship between PBV and market price is positive and significant because the historical

price to book value can be used to forecast the future market price of the stock. Therefore, investors looking for capital gain in the market price can use the PBV for predicting the future market price.

5.2.4 Price to Earnings Ratio and Market Price

The result from the multiple regression analysis shows that PE ratio has a positive and significant effect on the market price of shares for the companies listed in SET during 2014 to 2016. This means that when PE increases, market price will also increase. This is consistent with the findings of Sharif et al. (2015). Arslan, Zaman and Phil (2014) also found that PE ratio significantly determine the market price of shares for non-financial companies in Pakistan. The reason for this positive and significant relationship between PE ratio and market price of stock is because, when PE is higher investors generally anticipate a higher growth in earnings and thus there will be increasing demand for the shares of the company with higher PE ratio. This will drive the market price of the companies with higher PE ratio upward.

This study as therefore shown that the measures of profitability of the company in terms of EPS, NPM, PBV and PE ratio are able to predict the future market price of the companies listed in the Stock Exchange of Thailand.

5.3 Limitations of the Study

This study is not without limitations. The limitations are as follows

1. The relationship between financial performance and market price is not conclusive because only few financial performance ratios which are found to be important according to previous empirical studies were used in this study.
2. This study does not consider the macro-economic factors that can affect market price of shares like the GDP, inflation, interest rate and business cycle.
3. The data use for this study ranged for only 3 years from 2014 to 2016. It is however, possible to have a slightly different result if the range year is more than five

5.4. Recommendations for future studies

1. The data of this study was collected from SET 100 index of companies from 2014 until 2016; therefore, it may be suitable to collect data over a period of time beginning from 5 years or 10 years in order to complete the efficiency of the study.
2. The variables in this study may not be able to explain all the changes of the market prices. With this said, suitable variables that are related may be added into future study.
3. A future study may also look at the macro- economic factors that may affect stock prices apart from the firm performance which is firm specific.

5.5 Practical Implications

This study serves as a guide to investors and potential investors by showing the relationship between firms' profitability and market price of the stock. This study also helps investors to make an investment decision as this study has found out that the financial performance can forecast the levels of the market prices of companies that are registered in the SET 100 stock exchange market. Therefore, if investors can forecast their financial performance and found out that their financial performance will be high, their market price will also increase as well. It is a guide for CEOs willing to drive up the market price of the company's share and maximize benefit to the shareholders that focusing on improving the company's profitability is certain to increase the market share of the price.

References

Aktaş, R., & Seyfettin, Ü. N. A. L. (2015). The relationship between financial efficiency ratios and stock prices: An empirical investigation on insurance companies listed in borsa Istanbul. *Finansal Araştırmalar ve Çalışmalar Dergisi*, *7*(12), 1-16.

Ang, J. S., & Ding, D. K. (2006). Government ownership and the performance of government-linked companies: The case of Singapore. *Journal of Multinational Financial Management*, *16*(1), 64-88.

Anwaar, M. (2016). Impact of Firms' Performance on Stock Returns (Evidence from Listed Companies of FTSE-100 Index London, UK). *Global Journal of Management and Business Research: Accounting and Auditing*, 16(1).

Aras, G., & Yilmaz, M. K. (2008). Price-earnings ratio, dividend yield, and market-to-Book ratio to predict return on Stock Market: Evidence from the Emerging Markets. *Journal of Global Business and Technology*, *4*(1), 18.

Arkan, T. (2016). The importance of financial ratios in predicting stock price trends: A case study in emerging markets. *Finanse. Rynki Finansowe, Ubezpieczenia*, (1), 79.

Arslan, M., Zaman, R., & Phil, M. (2014). Impact of dividend yield and price earnings ratio on stock returns: A study non-financial listed firms of Pakistan. *Research Journal of Finance and Accounting), ISSN*, 2222-1697.

Baker, M., & Wurgler, J. (2006). Investor sentiment and the cross-section of stock returns. *The Journal of Finance*, *61*(4), 1645-1680.

Ball, R., & Brown, P. (1968). An empirical evaluation of accounting income numbers. *Journal of accounting research*, 159-178.

Barry, C. B., & Brown, S. J. (1985). Differential information and security market equilibrium. *Journal of Financial and Quantitative Analysis*, *20*(4), 407-422.

Basu, S. (1977). Investment performance of common stocks in relation to their price-earnings ratios: A test of the efficient market hypothesis. *The journal of Finance*, *32*(3), 663-682.

Berk, J. B., & DeMarzo, P. M. (2007). *Corporate finance*. Pearson Education.

Blackburn, V. L., Doran, M., & Shrader, C. B. (1994). Investigating the dimensions of social responsibility and the consequences for corporate financial performance. *Journal of Managerial Issues*, 195-212.

Billings, B. K., & Morton, R. M. (2001). Book-to-market components, future security returns, and errors in expected future earnings. *Journal of Accounting Research*, *39*(2), 197-219.

Burrough, B., & Helyar, J. (1990). Barbarians at the Gate: The Fall of RJR Nabisco. Harper and Row: NY.

Chang, H. L., Chen, Y. S., Su, C. W., & Chang, Y. W. (2008). The relationship between stock price and EPS: Evidence based on Taiwan panel data. *Economics Bulletin*, *3*(30), 1-12.

Chen, Y. (2010). *Agency issues and the effects of corporate governance mechanisms on agency costs in Chinese listed companies*. Cardiff University (United Kingdom).

Dita, A. H., & Murtaqi, I. (2014). The Effect of Net Profit Margin, Price to Book Value and Debt to Equity Ratio to Stock Return in the Indonesian Consumer Goods Industry. *Journal of Business and Management*, *3*(3), 305-315.

Dobson, J., & Sabino, A. M. (1991). Ethics of Shareholder Referendums: Corporate Democracy or Hypocrisy? Counterpoint. *Review of Business*, *13*(3), 22.

Drury, C. (2008). *Management and Cost Accounting* (7th ed.). London: Cengage learning. http://dx.doi.org/10.1007/978-1-4899-6828-9

Duangkamol W. (2016) *Factors Influencing on the Property and Construction Industries Stock Return : Evidence from the Stock Exchange of Thailand*, Bangkok University

Esmaeili, H. (2002). *research on the relationship between financial ratios and stock prices of listed companies in Tehran Stock Exchange for the years 1381-1375* (Doctoral dissertation, MS Thesis Accounting, Islamic Azad University, Science and Research Branch of Tehran).

Eugene F. B. Michael C. (2015), *Financial Management: Theory & Practice 15th Edition*. Boston, MA: Cengage Learning.

Fama, E. F., & French, K. R. (1993). Common risk factors in the returns on stocks and bonds. *Journal of financial economics*, *33*(1), 3-56.

Foye, J. (2013). *Islamic Azad University, Science and Research Branch of Tehran.* [Online] Available at: http://www.cek.ef.uni-lj.si/doktor/foye.pdf [Accessed 25 December 2017].

Gottwald, R. (2012). *The Use of the P/E Ratio to Stock Valuation.* [Online] Available at: http://www.grantjournal.com/issue/0102/PDF/0102gottwald.pdf[Accessed 25 December 2017].

Hobart, J. J. (2016). *Crisis Investor: Turning Financial Calamities Into Profitable Opportunities Successfully*. Lulu. com.

Hogarth, J. M. & Chris E. A. (2003). *Can the Poor Save?: Financial Counseling and Planning* 14(1).

Irfan, C. M., Nishat, M., & Sharif, H. (2002). Key Fundamental Factors and Long-run Price Changes in an Emerging Market—A Case Study of Karachi Stock Exchange (KSE)[with Comments]. *The Pakistan Development Review*, 517-533.

Ittner, C. D., Larcker, D. F., & Randall, T. (2003). Performance implications of strategic performance measurement in financial services firms. *Accounting, organizations and society*, *28*(7-8), 715-741.

Jabbari, E., & Fathi, Z. (2014). Predication of stock returns using financial ratios based on historical cost, compared with adjusted prices (Accounting for inflation) with neural network approach. *Indian Journal of Fundamental and Applied Life Sciences*, *4*(4), 1064-1078.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The American economic review*, *76*(2), 323-329.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, *3*(4), 305-360.

Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American economic review*, *90*(2), 22-27.

Joshi, P.L. & Gao, S. S. (2009). Multinational corporations' corporate social and environmental disclosures (CSED) on web sites. *International journal of commerce and management*, *19*(1), 27-44.

Karan, M. B. (1996). Hisse Senetlerine Yapılan Yatırımların Performanslarının Fiyat/Kazanç Oranına Göre Değerlendirilmesi:İMKB Üzerine Ampirik Bir Çalışma. İktisat. *İşletme ve Finans,* 11(119), 26-35.

Khan, A. Q., Ikram, S., & Mehtab, M. (2011). Testing weak form market efficiency of Indian capital market: A case of national stock exchange (NSE) and Bombay stock exchange (BSE). *African Journal of Marketing Management*, *3*(6), 115-127.

Kohansal, M. R., Dadrasmoghadam, A., Mahjori Karmozdi, K., & Mohseni, A. (2013). Relationship between financial ratios and stock prices for the food industry firms in stock exchange of Iran. *World Applied Programming*, *3*.

Kreps, D.M. (1990) *A Course in Microeconomic Theory,* Princeton, NJ: Princeton University Press.

Lau, C. M., & Tan, S. L. (2003). The effects of participation and job-relevant information on the relationship between evaluative style and job satisfaction. *Review of Quantitative Finance and Accounting*, *21*(1), 17-34.

Leungrungrueng S. (2008) *Study of the Relationship between Profitability and Return on Stock Price in Real Estate Development Sector*, University of the Thai Chamber of Commerce

Libby, P. A., Libby, R., Phillips, F., Whitecotton, S., & Cory, S. N. (2010). Principles of Accounting. *Issues in Accounting Education*, *25*(2), 347-348.

McDonald, B., & Morris, M. H. (1984). The statistical validity of the ratio method in financial analysis: An empirical examination. *Journal of Business Finance & Accounting*, *11*(1), 89-97.

McDonald, B., & Morris, M. H. (1985). The functional specification of financial ratios: an empirical examination. *Accounting and Business Research*, *15*(59), 223-228.

Nargelecekenler, M. (2011). Stock Prices and Price/Earning Ratio Relationship: A Sectoral Analysis with Panel Data. *Business and Economics Research Journal*, *2*(2), 165-165.

Ocharatporn T. (2008) *Relationship between key financial rations and stock prices in the banking sector, The Stock Exchange of Thailand*, Chiangmai, Chiangmai University.

Okafor, C. A., & Chijoke-Mgbame, A. M. (2011). Dividend policy and share price volatility in Nigeria. *Jorind*, *9*(1), 202-210.

Padilla, A. (2002). Can agency theory justify the regulation of insider trading?. *The Quarterly Journal of Austrian Economics*, *5*(1), 3-38.

Petcharabul, P., & Romprasert, S. (2014). Technology industry on financial ratios and stock returns. *Journal of Business and Economics*, *5*(5), 739-746.

Piotroski, J. D., & Roulstone, D. T. (2004). The influence of analysts, institutional investors, and insiders on the incorporation of market, industry, and firm-specific information into stock prices. *The Accounting Review*, *79*(4), 1119-1151.

Salmi, T. & Martikainen, T. (1994). A Review of the Theoretical and Empirical Basis of Financial Ratio Analysis. *The Finnish Journal of Business Economics,*, 4(94), 426-448.

Seangsanon N. (2005) *The Relationship between Financial Ratios and Stock Prices of Food and Beverage Groups in The Stock Exchange of Thailand* (Unpublished M.B.A thesis). Graduate School, Bangkok University, Thailand.

Sharif, T., Purohit, H., & Pillai, R. (2015). Analysis of Factors Affecting Share Prices: The Case of Bahrain Stock Exchange. *International Journal of Economics and Finance*, *7*(3), 207.

Siqueira, E., Otuki, T., & Da Costa, N. (2012). Stock Return and Fundamental Variables: A Discriminant Analysis Approach. *Applied Mathematical Sciences*, *6*(115), 5719-5733.

Srinivasan, P. (2012). Determinants of equity share prices in India: A panel data approach. *The Romanian Economic Journal*, *46*(6), 205-228.

Ștefan, I. O. (2016). The implications of financial performance on stock exchange indicators of listed companies&58; empirical evidence for the Romanian capital market. *Audit Financiar*, *14*(140), 875.

Suntornburut N. (2002) *Relationship between Stock Price and Financial Ratios : Studies Listed Communication Industries in Stock Exchange of Thailand,* Kasetsart University

Suttipun, M. (2012). Triple bottom line reporting in annual reports: A case study of companies listed on the Stock Exchange of Thailand (SET). *Asian Journal of Finance & Accounting*, *4*(1), 69.

The Stock Exchange of Thailand (2017), *History & Roles.* [Online] Available at: https://www.set.or.th/en/about/overview/history_p1.html [Accessed 24 December 2017]

The Stock Exchange of Thailand (2017), *Mission & Vision.* [Online] Available at: https://www.set.or.th/en/about/vision/vision_p1.html[Accessed 24 December 2017]

The Stock Exchange of Thailand (2017), *SET Index Series: SET50 Index and SET100 Index.* [Online] Available at: https://www.set.or.th/en/products/index/setindex_p3.html [Accessed 24 December 2017]

Wang, J., Fu, G., & Luo, C. (2013). Accounting information and stock price reaction of listed companies—empirical evidence from 60 listed companies in Shanghai Stock Exchange. *Journal of Business & Management*, *2*(2), 11-21.

Zhang, X. (2006). Information uncertainty and stock returns. *The Journal of Finance*, *61*(1), 105-137.

APPENDIX

DATA COLLECTED

Subject: The relationship between firm profitability and stock price: A case study of SET100 listed company in the stock exchange of Thailand during 2014 to 2016

---

1. Company's name ----------

2. Firm's Profitability and Market Price:

Profitability Ratios	2014	2015	2016
Net Profit Margin			
Price to Earnings			
Earnings per Share			
Price to Book			
Market Price of Stock			

3. Firm age ----------year(s)

4. Industry type

☐1.) Agriculture and Foods ☐2.) Financials ☐3.) Industrials

☐4.) Property and Constructions ☐5.) Resources ☐6.) Services

☐7.) Technology

5. Audit type

☐1.) Big 4 ☐2.) Non Big 4

6. Ownership status

☐1.) Government ☐2.) Public

VITAE

Name: Wanphat Choksakunphan

Student ID: 5610521111

Educational Attainment:

Degree	Name of Institution	Year of Graduation
Bachelor of Economics (International Program)	Thammasart University	2006

Work-Position and Address

CEO and Co-founder
Junglefoods Co.,Ltd.
318-320 Chareonketh Road
Sungaigolok, Narathiwat, Thailand 96120
Mobile: +6685-5192615
Email: junglefoods.junglefoods@gmail.com