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The Value Relevance of Financial Performance on Stock Price of Thai Listed Company: Evidence from High Dividend Group

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Abstract

This research aims to explore the relationships between stock price and earning per share, book value per share, dividend paid rate, and net cash flow from operating activities among the listed Thai company with high dividend (SET high dividend group: SETHD). Data used in this research has been collected from 81 firm-year through the Stock Exchange of Thailand's database from 2012 to 2015. In addition, the interviews have been performed with 20 investors by specific randomly selected interview. Pieces of information used for the quantitative analytical process are earning per share, book value per share, dividend payout ratio, and net cash flow from operating activities by Correlation Analysis and Multiple Regression Analysis at the 95% confidence interval and qualitative analysis method from indepth personal interviews. The results from this research reveal that earning per share, book value per share, dividend payout ratio, and net cash flows from operating activities have a relationship with the stock price at the 95% confidence interval. These results imply that earning per share, book value per share, dividend gayout ratio, and net cash flow from operating activities together can explain the stock price of the companies listed in SET High Dividend 30 Index which is a group of companies that have the highest dividend payout.

Keywords: SETHD, Financial Performance, Stock Price

1. Introduction

Financial performance is the crucial financial information that every company listed in the stock exchange must announce to the public, especially to the investors, at the end of each accounting period. This information can signal investors about the efficiency and effectiveness of business management. Financial performance can be derived from financial ratios such as liquidity ratio, debt ability ratio, asset management ability ratio, earning ability ratio, and market value ratio. Out of these financial ratios, investors also interested in other financial information. According to the works of Ball and Brown (1968), Keorath (1996), Sumritpradit (2002), Rattapradid (2009), Vachirasrisuntra (2011), Visedsun (2012), Visedsun (2014), and Sathapanaratkul (2015) confirmed that most of the investors usually employ financial information to assist their investment decision such as earning per share, book value per share, dividend payout ratio, and net cash flows from operating activities. The investors usually use earning per share and book value per share because investors will focus mainly on company performance due to the company's stability. In the other hand, for companies with high risk, investors usually employ net cash flows from operating activities according to the Capital Asset Pricing Model (CAPM) which help the investors to estimate their return from expected cash flows with the consideration of risk. Therefore, investors use different financial information in different circumstances. Investors can be classified into two groups which are short-term investors and long-term investors. Short-term investors focus on the company's earnings because earning announcement will affect the stock price according to Effective Market Hypothesis; therefore, focusing on the company's earning is crucial for speculation. Long-term investors, on the other hand, expect for the high dividend paid; therefore, long-term investors are interesting in the company with high dividend payout. According to this logic, the dividend paid and dividend announcement will affect the stock price.

In a present day, Stock Exchange of Thailand (SET) developed SET High Dividend 30 Index (SETHD) to reflect the change in high market capitalization, high liquidity, high consistency, and high dividend payout stocks. This index has established since July 4, 2011 (Stock Exchange of Thailand, 2015). Therefore, SET High Dividend 30 Index is another option that the Stock Exchange of Thailand facilitates long-term investors who focus on the long-term investment in the companies with the high dividend paid rather than speculation purpose.



There are many pieces of research in the past indicated that financial information from financial reports affects investors 'decision and stock price. For example, Keorath (1996) found that the profit announcement of listed companies positively affects the stock price. Besides, Sumritpradit (2002) discovered that earning performance and book value together could explain the stock price. Furthermore, Kumyim (2008) revealed that accounting conservatism affects the earning ability to explain the stock price both positive and negative ways. Lastly, Vachirasrisuntra (2011) found that dividend payment announcement leads to the decrease in stock price both negative and positive directions.

According to all backgrounds previously explained, the authors are interested in studying financial information of the companies listed in SET High Dividend 30 Index (SETHD) and focus on the relevance in investment decision of this group of companies that have a high market price, high liquidity, and high sensitivity with economic conditions. This interest led to the research question of how investors place importance on financial performance information for investment decision making in companies listed in SET High Dividend 30 Index.

2. Objectives

2.1 This research aims to examine the relationship between earning per share and the stock price from the listed companies in SETHD index.

2.2 This research aims to examine the relationship between dividend payout rate, operating cash flows per share, and the stock price from the listed companies in SETHD index.

2.3 This research aims to analyze the size of the relationship between earning per share, book value per share, dividend payout rate, and net operating cash flow per share and the stock price from the listed companies in SETHD index.

3. Methods

3.1 Population and Samples

The population of this research consists of 30 listed companies in the stock exchange of Thailand with the highest dividend payout (SET High Dividend 30 Index). The data are collected between 2012 - 2015. 81 samples are specifically random, email and telephone interviews have been conducted with 20 investors who are investors from Thai investment funds and private investors.

3.2 Data Collection

The data employed in this study are primary and secondary data. The secondary data are collected from the database of listed companies in the Stock Exchange of Thailand (SET). Besides, the data are collected on a financial date between 2012-2015 from company's 56-1 and annual financial reports. The stock prices are also collected between 2012-2015 from the database from Maruay library and www.setsmart.com. The primary data are derived from investor interview from email, telephone, and personal interviews by appointment.

3.3 Variables and Measurement

The variables in this research consist of;

Earning per share is the basic net profit and loss per share presented in the statement of comprehensive income of the top 30 listed companies in SETHD index.

Book Value per Share is the average equity per share at net profit announcement date of the top 30 listed companies in SETHD index.

Dividend payout rate is the dividend payout per share at the net profit announcement date of the top 30 listed companies in SETHD index.

Net operating cash flow per share is an average operating cash flow per common share at the net profit announcement date of the 30 listed companies in SETHD index.

Stock price is the market value of each stock of the 30 listed companies in SETHD index at the net profit announcement date.

3.4 Research Hypothesis

Hypothesis 1: Earning per share has a relationship with the stock price of listed companies in SETHD index



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Hypothesis 2: Book value per share has a relationship with the stock price of listed companies in SETHD index

Hypothesis 3: Dividend payout ratio has a relationship with the stock price of listed companies in SETHD index

Hypothesis 4: Net operating cash flows per share has a relationship with the stock price of listed companies in SETHD index

3.5 Data Analysis

This research employs both quantitative analysis and qualitative analysis. The data used in this study come from primary sources which are email, telephone, and personal interviews while secondary sources are investor library and www.setsmart.com. For quantitative analysis, this research employs a descriptive statistic to describe the characteristics of the sample groups. Correlation analysis and multiple regression are used for establishing the relevance test model that is able to predict the value of the dependent variable which is stock price (P) from 4 independent variables which are earning per share (EPS), book value per share (BPS), dividend payout ratio (DPR), and net cash flow from operating activities (CFO) at the 95% confidence level.

For qualitative analysis, the primary data are collected from investors through unconstructed interviews via email, telephone, and personal interviews. The investors' interviews aim to explore the use of financial information in decision making; the financial information in the interviews includes earning per share, book value per share, dividend payout ratio, and net operating cash flow of top 30 listed companies in SETHD index at the profit announcement date.

3.6 Research Models

P _{it}	=	$\beta_0 + \beta_1 EPS_{it} + \epsilon_{it}$	(1)
P _{it}	=	$\beta_0 + \beta_1 BPS_{it} + \varepsilon_{it}$	(2)
P _{it}	=	$\beta_0 + \beta_1 DPR_{it} + \varepsilon_{it}$	(3)
P _{it}	=	$\beta_0 + \beta_1 CFO_{it} + \varepsilon_{it}$	(4)
P _{it}	=	$\beta_0 + \beta_1 EPS_{it} + \beta_2 BPS_{it} + \epsilon_{it}$	(5)
P _{it}	=	$\beta_0 + \beta_1 DPR_{it} + \beta_2 CFO_{it} + \epsilon_{it}$	(6)
P _{it}	=	$\beta_0 + \beta_1 EPS_{it} + \beta_2 BPS_{it} + \beta_3 DPR_{it} + \beta_4 CFO_{it} + \epsilon_{it}$	(7)
Where			

P_{it} Stock price at the profit announcement date of company i of year t from 30 listed companies in SETHD index

- EPS_{it} Earning per share of company i of year t from 30 listed companies in SETHD index
- BPS_{it} Book value per share of company i of year t from top 30 listed companies in SETHD index
- DPR_{it} Dividend payout ratio of company i of year t from top 30 listed companies in SETHD index
- CFO_{it} Net cash flows from operating activities per share of company i of year t from top 30 listed companies in SETHD index
- ϵ_{it} Error

4. Results and Discussions

4.1 Sample Group

The number of sample group are shown in table 1



Industry	Number	Percentage
Natural resources	29	35.80
Construction and real estate	29	35.80
Technology	10	12.35
Food and agriculture	8	9.88
Services	3	3.70
Industrial Products	2	2.47
Total	81	100.00

According to Table 1, the total samples in this research are 81 companies including 29 companies from natural resources industry (35.80%), 29 companies from construction and real estate industry (35.80%), 10 companies from technology industry (12.35%), 8 companies from food and agriculture industry (9.88%), 3 companies from service industry (3.70%), and 2 companies from industrial products industry (2.47%).

4.2 Descriptive Statistics

Descriptive statistics from five variables are shown in table 2

Table 2 Descriptive Statistics								
Variable	Minimum	Maximum	Mean	Std. Deviation				
Р	2.12	554.00	86.23	127.73				
EPS	-8.24	37.83	6.06	9.60				
BPS	1.68	285.29	45.39	65.99				
DPR	2.02	8.33	4.19	1.25				
CFO	-8.01	79.94	8.26	17.57				

As stated in Table 2, mean of stock price (P) is 86.23 and the standard deviation is 127.73, these numbers imply that the sample companies have different company's value. Earning per share (EPS) has a mean at 6.06 and standard deviation at 9.60 which could imply that the sample companies have a slightly difference in earning per share. For book value per share (BPS), mean is 45.39 and the standard deviation is 65.99 which imply that the sample companies have different capital structure. For dividend payout ratio, mean is 4.19 and the standard deviation is 1.25 which mean that the dividend payout ratio of sample companies is slightly different in accordance with earning per share (EPS). Finally, for net cash flows from operating activities of the sample companies are slightly different comparing with stock price (P) and book value per share (BPS).

4.3 Correlation Analysis

The results from correlation analysis are presented in table 3

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Pearson Correlation		Price	EPS	BPS	DPR	CFO
Р	Pearson Correlation	1				
EPS	(Sig.) Pearson Correlation	.776**	1			
	(Sig.)	(.000)				
BPS	Pearson Correlation	.779**	$.800^{**}$	1		
	(Sig.)	(.000)	(.000)			
DPR	Pearson Correlation	.646**	.963**	$.802^{**}$	1	
	(Sig.)	(.000)	(.000)	(.000)		
CFO	Pearson Correlation	$.568^{**}$.422**	.629**	$.404^{**}$	1
	(Sig.)	(.000)	(.000)	(.000)	(.000)	

Table 3 Correlation Analysis

**. Correlation is significant at the 0.01 level



According to the results of correlation analysis as shown in Table 3, earning per share (EPS), book value per share (BPS), dividend payout ratio (DPR), and net cash flow from operating activities (CFO) form a relationship with stock price (P) of the 30 listed companies in SETHD index at the 0.01 significant level. The results from the Pearson Correlation Coefficient reveal that dependent and independent variables form a relationship with each other; therefore, these variables will be further analyzed using multiple regressions.

4.4 Multiple Regression Analysis

For multiple regression analysis, stock price (P) is determined as a dependent variable and earning per share (EPS), book value per share (BPS), dividend payout ratio (DPR), and net cash flow from operating activities (CFO) are determined as independent variables. These variables are analyzed using multiple regression equations as follows;

Variable	Equation 1	$P_{it} = \beta_0 + \beta_1 EP$	$S_{it} + \varepsilon_{it}$	Equation 2 $P_{it} = \beta_0 + \beta_1 BPS_{it} + \varepsilon_{it}$		
variable	Coefficients	t	Sig.	Coefficients	t	Sig.
Constant	23.661	2.218	.029	17.824	1.635	.106
EPS	10.329	10.94^{**}	.000	-	-	-
BPS	-	-	-	1.507	11.029**	.000
	$F = 119.746^{**}$	Sig. = .000		$F = 121.627^{**}$	Sig. = .000	
	$R^2 = 0.603$	Adjusted $R^2 = 0$.597	$R^2 = 0.606$	Adjusted $R^2 = 0$.	.601

Table 4 Multiple Regression Analysis of Equation 1 and 2

** Significant at .01 level

The results from Table 4 reveal that by having a Sig. value at 0.000, it could be interpreted that the dependent variable in equation 1 which is earning per share (EPS) and independent variable in equation 2 which is book value per share (BPS) have a relationship with stock price (P) at 0.01 significant level. These independent variables are able to describe the changes in stock price. Moreover, the adjusted R^2 is 0.597 and 0.601 respectively which means these equations accept research hypothesis 1 and 2.

Variable	Equation 3	$P_{it} = \beta_0 + \beta_1 DPR_{it}$	$t + \varepsilon_{it}$	Equation 4	4 $P_{it} = \beta_0 + \beta_1 CFO_{it} + \varepsilon_{it}$	
v al lable	Coefficients	t	Sig.	Coefficients	t	Sig.
Constant	36.543	2.867	.005	52.133	4.008	.000
DPR	2.176	7.521**	.000	-	-	-
CFO	-	-	-	4.127	6.129^{**}	.000
	$F = 56.569^{**}$	Sig. = .000		$F = 37.568^{**}$	Sig. = .000	
	$R^2 = 0.417$	Adjusted $R^2 = 0$.410	$R^2 = 0.322$	Adjusted $R^2 = 0$	0.314

Table 5 Multiple Regression Analysis of Equation 3 and 4

** Significant at .01 level

According to the multiple regression analysis of equation 3 and 4, the Sig. value is 0.000 which reveals that the independent variable in equation 3 (dividend payout ratio, DPR) and the independent variable in equation 4 (net cash flows from operating activities, CFO) form a relationship with stock price (P) at 0.01 significant level, meaning that independent variables from equation 3 and 4 are able to explain the changes in stock price (P). In addition, the values of adjusted R^2 in this analysis are 0.410 and 0.314 respectively; therefore, these equations accept research hypothesis 3 and 4.



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Variable	Equation 5 $P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BPS_{it} + \varepsilon_{it}$				Equation 6 $P_{it} = \beta_0 + \beta_1 DPR_{it} + \beta_2 CFO_{it} + \varepsilon_{it}$			
variable	Coefficients	t	Sig.	VIF	Coefficients	t	Sig.	VIF
Constant	13.446	1.334	.186	-	25.901	2.198	.310	-
EPS	5.666	3.931**	.000	2.784	-	-	-	-
BPS	0.847	4.042^{**}	.000	2.784	-	-	-	-
DPR	-	-	-	-	1.677	5.868^{**}	.000	1.195
CFO	-	-	-	-	2.666	4.322^{**}	.000	1.195
	$F = 79.671^{**}$	Sig. = .000)		$F = 43.853^{**}$	Sig. = .000)	
	$R^2 = 0.671$	Adjusted F	$R^2 = 0.663$		$R^2 = 0.530$	Adjusted H	$R^2 = 0.518$	

 Table 6 Multiple Regression Analysis of Equation 5 and 6

** Significant at .01 level

The results from Table 6 show that a Sig. value of equation 5 and 6 is 0.000 which means that independent variables in equation 5, which are earning per share (EPS) and book value per share (BPS), and independent variables in equation 6, which are dividend payout ratio (DPR) and net cash flow from operating activities (CFO), form a relationship with stock price (P) at 0.01 significant level. It can imply that the four independent variables are able to explain the changes in stock price (P) with adjusted R² values of 0.663 and 0.518, respectively. For the analysis of β , the values of β_1 and β_2 in the equation are significant at .01 level, this could imply that earning per share (EPS) and book value per share (BPS) can explain the changes in stock price (P). In equation 6, the values of β_1 and β_2 are also significant at .01 level as in equation 5; this could also imply that dividend payout ratio (DPR) and net cash flow from operating activities (CFO) are able to explain the changes in stock price (P) as well. Therefore, research hypothesis 1-4 are accepted by the results from equation 5 and 6. Moreover, VIF value from this analysis is close to 1 and not greater than 10; therefore, multicollinearity does not exist in this case.

Table 7	Multiple	Regression	Analysis	of equation 7
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Variable	Equation 7	Equation 7 $P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 BPS_{it} + \beta_3 DPR_{it} + \beta_4 CFO_{it} + \beta_4 CF$				
variable	Coefficients	t	Sig.	VIF		
Constant	8.180	1.273	.207	-		
EPS	25.245	12.151**	.000	3.266		
BPS	0.940	5.793^{**}	.000	4.219		
DPR	5.447	10.227^{**}	.000	1.138		
CFO	0.829	2.098^*	.039	1.718		
	$F = 128.068^{**}$		Sig. = .000			
	$R^2 = 0.871$		Adjusted $R^2 = 0.864$			

** Significant at .01 Level

* Significant at .05 level

According to Table 7, the multiple regression analysis shows that the Sig. value is 0.000 which means that earning per share (EPS), book value per share (BPS), Dividend payout ratio (DPR), and net cash flow from operating activities (CFO) form a relationship with stock price (P) at 0.01 significant level. Hence, these independent variables are able to explain the changes in stock price. Furthermore, the adjusted R^2 value from this table is 0.864. For analysis of β , the results show that β_1 , β_2 , and β_3 are significant at .01 level while β_4 is significant at .05 level. These results confirm that earning per share, book value per share, dividend payout ratio, and net cash flow from operating activities can explain the changes in stock price. In additional, VIF value from this analysis is close to 1 and not more than 10; therefore, multicollinearity does not exist in this case as well.

4.5 Comparison of Relationship

The results from multiple regression analysis of equation 1-7 show that adjusted R^2 equal to 0.597, 0.601, 0.410, 0.314, 0.663, 0.518, and 0.864, respectively. The interpretation from these values is equation 1-7 that are able to determine the stock price at 597%, 60.1%, 41.0%, 31.4%, 66.3%, 51.8%, and 86.4%, respectively. The left-over portions of each percentage represent other several factors that affect stock price. Furthermore, equation 7 is the best equation for determining stock price because its adjusted R^2 is 0.864 or 86.4%, which is the highest value as compared to those of other equations.



After considering each dependent variable from equation 1-4, the results reveal that book value per share has the highest ability to determine stock price (at 60.1%), followed by earning per share (59.7%), dividend payout ratio (41.0%), and net cash flow from operating activities (31.4%), respectively.

4.6 Results from Qualitative Analysis

As mentioned in the methodology section, this research collected both secondary data and primary data. The secondary data are collected and analyzed by statistic procedures while the primary data are collected by investors' interviews through email, telephone, and in person. This section described the results from qualitative analysis with primary data.

Information from investors' interviews reveal that, to determine stock, most of the investors choose earning per share while the rest employ dividend payout ratio, book value per share, and net operating cash flow, respectively. The reason why most of the investors employ earning per share is that they believe that earning per share is an indicator of the company performance as a whole. Besides, investors believe that dividend payout ratio can be used for predicting a long-term investment return while book value per share can be used for evaluating the company's financial status because this information is derived from the net asset of the company. Finally, investors use net cash flow from operating activities because this information reflects the company's cash status; however, this information is least used because it considers on cash basis only.

4.7 Discussions

According to the results, this study reveals that earning per share, book value per share, dividend payout ratio, and net cash flow from operating activities per share have a significant relationship with the stock price. Therefore, these figures are able to explain the stock price of the stock listed in SETHD index. These results comply with the works of Ball and Brown (1968), Keawrath (1996), Sumritpradit (2002), Rattapradid (2009), Vachirasrisuntra (2011), Visedsun (2012), Visedsun (2014), and Sathapanaratkul (2015). According to the results from this research and previous research, the financial performances affect the determination of stock price, and investors can seek benefits from the research for determining stock price or other investment purposes. Moreover, the results also show that book value per share is the best figure to explain the stock price in the SETHD index. However, the interviews from investors in SETHD index show some contradictions that the majority of the investors usually use earning per share to make investment decisions because earning per share is the most essential tool to evaluate the company's performance in the sense of the investors.

5. Conclusion

According to the results from this study, most of the companies listed in SETHD index between 2012-2015 are the companies from the natural resources industry and real estate and construction industry. The results from the Pearson correlation coefficient reveal that earning per share, book value per share, dividend payout ratio, and net operating cash flow form a positive relationship with the stock price at 95% confidence level.

Moreover, the results from multiple regression analysis show that earning per share, book value per share, dividend payout ratio, and net cash flow from operating activities have a relationship with the stock price at 95% confidence level. Besides, the results also demonstrate the ability of earning per share, book value per share, dividend payout ratio, and net cash flow from operating activities to explain the stock price of the companies listed in the SETHD index.

In addition, the analysis of the relationship between earning per share, book value per share, dividend payout ratio, and net cash flow from operating activities with the stock price shows that book value per share affects the stock price determination the most, followed by earning per share, dividend payout ratio, and net cash flow from operating activities, respectively.

In qualitative aspects, most investors who invest in 30 companies listed in SETHD index select earning per shares, followed by dividend payout ratio, book value per share, and net cash flow from operating activities respectively to assist their investment decisions.



Finally, as a suggestion for the future study, the researcher may include more dependent variables such as financial size, gross domestic product, and inflation rate. Further research may consider listed companies in each industry.

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