The Relationship between Corporate Governance and Return: An Empirical Study of the Listed Companies in the Stock Exchange of Thailand in the SET 100 Index

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Abstract

The literature on the relationship between corporate governance and firm value has widely been found. However, the firm value in terms of return which is considered beneficial to investors has been limited. Thus, this research examines such relationships using the companies listed in the Stock Exchange of Thailand in the SET 100 Index. Corporate governance is measured by the number of board of directors, the number of board of directors' meeting, the proportion of top executives to the board of directors, the proportion of independent directors to the board of directors, and the amount of board of directors' compensation. In addition, the dividend–adjusted return is analyzed. Multiple linear regression is estimated to examine such a relationship. A significant positive relationship between the number of board of directors' meeting and return is found. On the other hand, a significant negative relationship related to the amount of board of directors' compensation is evident. In addition, the insignificant relationships of the proportion of top executives to the board of directors, the proportion of independent directors to the board of directors, and the number of board of directors are showed. It is suggested that an investor should consider the firm with a high number of board meetings and a low amount of board member compensation, and the company itself should find new forms of compensation rather than cash benefits.

Keywords: Corporate Governance, Return, SET 100

Introduction

Corporate governance is the set of processes, customs, policies, laws and institutions, affecting the way a company is directed, administered or controlled (Aggarwal, 2013). The lack of corporate governance tends to cause financial crisis. For example, the financial crisis has typically been blamed on weak corporate governance mechanisms (Tonks and Goergen, 2019). As for investors, especially in the stock market, no matter where they are from, Thais or foreigners, return are mostly concerned. In order to gain favorable return, investors should regard financial statements. However, there existed evidence on putting a fake number into financial statements so called 'window dressing'. This would draw investors to lose their funds into that company, causing a lot of problems. Since reliable and transparent financial information is important, therefore, corporate governance plays an important role. The Securities Exchange of Thailand (SET) has implemented a system to measure how good corporate governance in a company is by using a rating system since 2002, and it has been published every year. The other critical issues that mitigate firm images and performance are insufficient transparency, inadequate independent auditors, concealment, unreliable financial information, and injustice in management of senior managers. All these problems have a direct negative effect on a firm, which consequently leads to corruption in the company. In Thailand, there are a lot of conversations about corporate governance all the time especially in the financial sector.

Even though corporate governance and return are crucial for investors, large previous studies have were conducted on corporate governance and firm value, but the evidence on corporate governance and return is limited. Therefore, this research examines and analyzes the corporate governance and return. In addition, corporate governance is focused on the role of the board of directors. The reason is that the board of directors is pivotal in governance, and it can have major ramifications for equity valuation as mentioned by Chen (2019).

Research Objective

The main objective of this research is to examine the relationship between corporate governance and common stock return in the Stock Exchange of Thailand in the SET 100 Index.

Scope of Research

The research includes the companies listed in the Stock Exchange of Thailand in the SET 100 Index from 2014 to 2016. An empirical study of the listed companies in the SET 100 Index is conducted because the companies in the SET 100 Index tend to be well–known reputation and highly attractive among investors. In addition, these companies have high market capitalization and trading volume, and have provided the annual report (56–1 form) for three years in the study period.

The remaining part of this paper consists as follows; section 1 is introduction, section 2 describes the literature review, including both theoretical background and previous related research. In section 3, research methodology is showed. In section 4 data analysis is indicated. In section 5, empirical results and discussion are considered, where conclusion and suggestion are presented in section 6.

Literature Review

Jensen and Meckling (1976) introduced the agency theory explaining that separation between the owner or shareholders and management caused agency problems. One of the causes of agency problems was asymmetric information. To clarify, the management or executives had more information related to the company performance than shareholders. Additionally, shareholders were not entirely sure about managing the company to best benefit themselves. Therefore, monitoring was required, but it could be hard in terms of cost and time consumed. One way that the owner could control was to vote to change the strategy or operation of the firm. Otherwise, shareholders could select the board members as their representatives. Because of that, the board of directors had a fiduciary duty. As the shareholders' representatives, the board members needed to have loyalty, justice, and commitment to protect shareholders' interests. As mentioned earlier, the board of directors played an important role in the company as the one who monitored and encouraged managers to work well and to prevent corruption. Because of their role, the board of directors tended to promote corporate governance in the company. The theory suggested that corporate governance was positively related to firm performance which would be beneficial to shareholders.

Considering previous studies, Roy Kouwenberg (2006) posted on the official SET website called "Better Governance = Better Performance?" This study discussed that in the past ten years, corporate governance had gained popularity in both the business world and in financial markets. This post also stated that one of the reasons of bad governance was when shareholders disagreed about how to run the company. According to research results from the Stock Exchange of Thailand in 2002 related to the impact of good governance, it was found that good corporate governance mattered. Fifteen firms having top scores rated by the SET in 2002 had a higher stock market value in the period of 2003– 2005 compared with companies that did not implement corporate governance. Also, in the period of 2003– 2005 the stock return of the top 20% companies with good corporate governance was 19% better than the stock return of the bottom 20% companies. Moreover, firms in the bottom 20% had lower performance measured by return on equity or ROE. ROE of firms in the bottom 20% was only 9.3% compared with firms in the top 20%, which was 15.2%. Lastly, not–so–good governance performed by firms in the bottom 20% had underperformed the SET index itself by more than 16% per year. This study concluded that Thai investors could have better return on investment from avoiding firms that did not have good corporate governance.

In addition, Worakamol Kaseamsap (2010) explained the relationship between corporate governance and overall operating results of listed companies in the Stock Exchange of Thailand in 2007 and 2008 and considered firm performance as return on equity or ROE, based on the accounting measurement and Tobin's Q, which was a market–based measurement. For corporate governance, the ratio of independent directors, board size, the number of board meetings, and CEO duality and corporate governance rating score were used. The results were that board size had a negative relationship with return on equity, but capital structure, which was a control variable represented by debt to equity ratio had a positive relationship with return on equity. Moreover, firm size, which was a control variable represented by log of total assets had a negative relationship with both return on equity and Tobin's Q. This paper focused on return in terms of dividends and capital gain.

Moreover, Nichanan Chantakhet (2011) conducted a study entitled "A study of the relationship between corporate governance and operating results of the listed companies In the Stock Exchange of Thailand, SET 100 Group". The study discussed that corporate governance had got the most interest from the public because good corporate governance resulted in good management and made financial statements become more reliable and trustworthy for investors. The study on

the relationship between corporate governance and operating results covered the period from 1 January 2011 to 30 May 2011. For corporate governance variables, there were board size, proportion of independent directors, top five major shareholders, and dual merger of president and chairman in the executive board. It was found that 3 variables including board size, top five major shareholders, and dual merger of president and chairman in the executive board had a positive relationship with operating results.

Another related study included Sasiwimon Kerdmun, Tharinee Pongsupatt, and Pitiphat Chataccaraphat (2014), who investigated the relationship of corporate governance with stock market returns and firm value of companies listed in the Stock Exchange of Thailand. Seven industries were studied excluding financial and banking industries. The study used data from a financial report in 2012. The result found a positive relationship between corporate governance and return on assets. Board size was found to have a positive relationship with earnings per share; The number of board meetings was positively related to dividend yield; corporate governance in terms of management compensation was found to have a positive relationship with firm value. This study also used corporate governance including major shareholders, proportion of independent directors, board size, number of board meetings, dual merger of president and chairman in the executive board, management compensation, board composition, diverse directors, and top five major shareholders. For the dependent variables, stock returns measured by the rate of return on assets, earnings per share, as well as dividend and firm value measured by Tobin's Q were used.

Conceptual Framework

The framework was exhibited in figure 1 below. Independent or explanatory variables were corporate governance affected by board of directors. Five proxies as described in figure 1 were used. The dependent variable was return, computed as dividend plus capital gain.

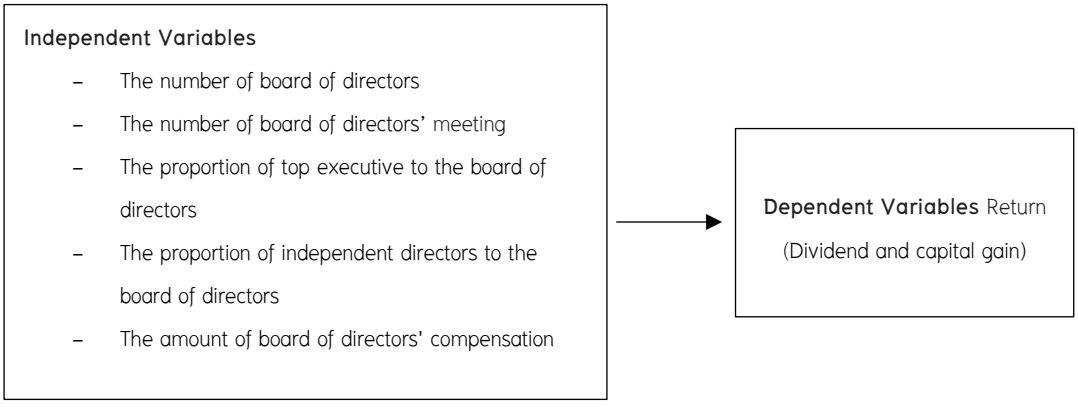

Figure 1 Conceptual Framework

Research Hypothesis

This research had five testable hypotheses as follows;

H1: The number of board of directors is positively related to return.

H2: The number of board of directors meeting is positively related to return.

H3: The proportion of top executives to the board of directors is positively related to return.

H4: The proportion of independent directors to the board of directors is positively related to return.

H5: The amount of board of directors' compensation is negatively related to return.

The number of board of directors, the number of board meeting and the proportion of top executives to the board of directors were hypothesized as having positive correlations to return due to the important role on corporate governance and responsibilities of care and loyalty in overseeing the business organization and protecting the shareholders' assets (www.thai-iod.com, 2019). Therefore, the number of board of directors and the board directors meetings implied value creation and thus positive correlation with return. The proportion of top executives of board of directors also reflected the role of top executives in the board of directors. As for proportion of independent directors, corporate governance was implied as argued by Jensen and Meckling (1976). This resulted in a positive correlations with firm value and thus stock returns.

In addition, a negative correlation between amount of board of directors' compensation and return was hypothesized. As indicated by Jensen and Mackling (1976), and Amihud and Baruch (1981), cash compensation was preferred because of fewer risks. In order to reduce their compensation risks, executives may be engaged in reducing the firm risks. These activities adversely affect shareholders' wealth and consequently return.

Research Methodology

Sample and Data Gathering

All listed companies of the SET100 Index within a three-year study period were used as the sample. Corporate governance measurement including number of board of directors, number of board of directors' meeting, proportion of top executives to the board of directors, proportion of

independent directors to the board of directors, and amount of board of directors' compensation were gathered from the SET annual report (56–1 form). whereas return and dividend were gathered from the SET website. From the 3–year study period, there remained 87 companies with a complete 56–1 form as showed in table 1 below:

Table 1 The number of listed companies of the SET100 Index used as the sample

Sector	Number of listed companies of the SET100 Index as of December 2016	Remaining companies in the 3–year period with a complete 56–1 form
Banking	9	9
Commerce	6	5
Construction Services	13	11
Electronic Components	4	4
Energy & Utilities	16	15
Finance and Securities	4	2
Food and Beverage	6	4
Health Care Services	4	4
Information & Communication Technology	6	6
Insurance	1	1
Media & Publishing	6	5
Petrochemicals & Chemical	2	2
Property Development	13	12
Tourism & Leisure	2	2
Transportation & Logistics	8	5
Total	**100**	**87**

Source: The Securities Exchange of Thailand (2016)

Data Analysis

Independent or Explanatory Variables

Five independent variables related to the board of directors were described in table 2 below as follows;

Table 2 Independent Variables

Independent Variables	Description
The number of board of directors (SIZEBOD)	The number of board members in the board of directors.
The number of board of directors meeting (MEETBOD)	The number of meetings of the board of directors in one year.
The proportion of top executives to the board of directors (EXEBOD)	The ratio of top executives in the board of directors.
The proportion of independent directors to the board of directors (INDBOD)	The ratio of independent directors in the board of directors.

The amount of board of directors' compensation (COMPBOD)	The amount of compensation of the board members in one year.

Dependent Variables

Dividend–adjusted return was used as an equation below;

$$Return\left(R_t\right)=\frac{D_t+(P_t-P_{t-1})}{P_{t-1}}$$

where, R_t means return at date t.

D_t means dividend payment at date t.

P_t means closing price at date t.

Whereupon, the daily return was converted to daily return to annual return by this equation;

$$Annual\ return = [(Average\ Daily\ return+1)^n-1]*100$$

This research did not use n as 365 days as the Stock Exchange of Thailand traded for 245 days in 2014, 243 days in 2015, and 244 days for 2016. Therefore, n=245, 243, 244 were for the year 2014, 2015, and 2016, respectively.

Model Construction

Multiple linear regression was used to analyzed the relationship with statistical significance levels of 0.01, 0.05, and 0.10. Three assumptions underlying regression including multicollinearity, autocorrelation, and heteroscedasticity were tested, using, Variance Inflation Factor(VIF) , Durbin–Watson and Breusch–Pagan–Godfrey, respectively. If these assumptions were not violated, the data would be further analyzed by multiple regression.

Multiple linear regression was used to measure the relationship as follows;

$$R_{it} = a + b_1SIZEBOD_t + b_2MEETBOD_t + b_3EXEBOD_t + b_4INDBOD_t + b_5COMPBOD_t$$

where, a was constant and b_1,b_2,b_3,b_4,b_5 were the coefficients of explanatory variables.

Empirical Results and Discussions

This section is shown the result of this study. In the process of the analysis of data based on the information gathered. The statistics used in the data analysis are divided into 2 categories as follows: Descriptive statistics and Inferential statistics.

Descriptive Statistics

Descriptive statistics were showed in table 3. The mean value for the number of board of directors was 11.53: the number of board of directors meeting was 9.28, the proportion of top

executives to the board of directors was 0.3: the proportion of independent directors to the board of directors was 0.4: the amount of board of directors' compensation was 19.4961 million baht, and the return was 38.80%.

Table 3 Descriptive statistics of corporate governance measurement and return of listed companies in the SET 100 Index

Variable	Mean	Standard Deviation	Maximum	Minimum
The number of board of directors (SIZEBOD)	11.5364	2.7025	18.0000	6.0000
The number of board of directors meeting (MEETBOD)	9.2874	4.2785	28.0000	4.0000
The proportion of top executives to the board of directors (EXEBOD)	0.3005	0.1747	0.6923	0.0000
The proportion of independent directors to the board of directors (INDBOD)	0.4208	0.0975	0.7857	0.2307
The amount of board of directors' compensation (COMPBOD) : million baht	19.4961	19.9038	105.0200	0.8100
Return (R) : %	38.80	779.32	695.10	–57.63

Assumption Underlying Regression Test Results

Assumptions underlying regression including multicollinearity, autocorrelation. and homoskedasticity were tested using Variance Inflation Factor(VIF) , Durbin– Watson. and Breusch–Pagan– Godfrey, respectively. The test results were showed in table 4 below. All VIFs were less than 5, indicating no multicollinearity problems, and Durbin– Watson were 2. 02, indicating no autocorrelation problems. Further, Breusch– Pagan– Godfrey was insignificant, indicating homoskedasticity or no heteroskedasticity. Therefore, assumptions underlying regression were met.

Table 4 Assumption Underlying Regression Test

	Measurement*	Research result	Interpretation
Multicollinearity	VIF < 5	VIF EXEBOD = 1.197 VIF INDBOD = 1.129 VIF SIZEBOD = 1.505 VIF MEETBOD = 1.210 VIF COMPBOD = 1.636	No Multicollinearity
Autocorrelation test: Durbin–Watson stat	D.W. near 2	2.02	No Autocorrelation
Homoskedasticity test: Breusch–Pagan–Godfrey	[Prob.< 0.05]	0.5028	No Heteroskedasticity

Note: *****_Akarapong Untong (2007)_

Multiple Linear Regression Results

According to the result of multiple regression in table 5, a multiple regression equation could be constructed as;

$$R_{it} = -0.089+.064SIZEBOD_t+.118MEETBOD_t+.092EXEBOD_t+.030INDBOD_t-.221COMPBOD_t$$

* ***

Table 5 Corporate Governance and Return

Variable	Beta	Sig
(Constant)	-0.089	.808
The number of board of directors (SIZEBOD)	.064	.395
The number of board of directors meeting (MEETBOD)	.118	.080*
The proportion of top executives to the board of directors (EXEBOD)	.092	.172
The proportion of independent directors to the board of directors (INDBOD)	.030	.642
The amount of board of directors' compensation (COMPBOD)	-.221	.005***
Adjusted R^2 = .046 F = 2.445 Sig = 0.035**		

*Note: ***,**,* Indicate statistical significance at 0.01, 0,05, 0.10*

Discussions

The results in table by table 5 above showed that number of board of directors meeting was positively statistically related to return at the 0.10 level of significance, with a coefficient of 0.118; In addition, the amount of board of directors' compensation was negatively related to return at the 0.01 level of significance, with a coefficient of -0.221; The number of board of directors, the proportion of top executives to the board of directors, and the proportion of independent directors to the board of directors had no statistical significance related to return. These were inconsistent with the hypotheses which would be caused by the downfall of corporate governance as suggested by Rebeiz and Salameh (2001). Such downfall was contributed to the lack of an independent boardroom configuration, such as an insufficient number of outside and independent directors and the combination of the role of CEO and chairmanship of the board. Another possible explanation was argued by Vance (1978), saying that stock appreciation(return) was more impacted by technical and manager experience of inside directors than any other attributes of the board room.

Conclusions

The literature on the relationship between corporate governance and firm value has widely been found. However, although the firm value in terms of return was beneficial to investors, the previous research were limited. Thus, this research aimed to explore the relationship between the corporate governance and return. The empirical research used the companies listed in the Stock Exchange of Thailand in the SET 100 Index. Corporate governance indicated by the role of the board of directors was measured by the number of board of directors, the number of board of directors' meeting, the proportion of top executives to the board of directors, the proportion of independent directors to the board of directors, and the amount of board of directors' compensation. Dividend adjusted return including dividend and capital gain was computed. Multiple linear regression was estimated to examine such relationship with statistical significance levels of 0.01, 0.05 and 0.10. The results showed that the number of board of directors meeting and the amount of board of directors' compensation were statistically significantly related to return with coefficients of 0.118 and –0.221, respectively. In addition, the proportion of top executives to the board of directors, the proportion of independent directors to the board of directors, and the number of board of directors were not significantly related to return

Recommendations

According to the research results, it can be applied to both investors and corporations. Considering an investor's perspective, the company with a high number of board meetings should be considered due to the positive relationship with return. In addition, a low amount of board member compensation should also be considered due to the negative relationship with return. As for the company perspective, in order to achieve shareholders' wealth maximization, it is suggested that the increase in the proportion of top executives in the board of directors, the proportion of independent directors in the board of directors, and the number of board members should be considered because low proportions of top executives and independent directors in the board of directors were evident at the average of 30% and 40%, respectively. Another suggestion is that new forms of compensation rather than cash benefits should be applied, for example equity–based pay, because the unfavorable negative relationship between cash compensation and return was

revealed. Compensation in terms of equity–based pay may include incentive stock option as argued by Jensen and Mackling (1976).

A low proportion of top executives to board of directors, a low proportion of independent directors to the board of directors and a low number of board of directors were empirically were found, which may result in an insignificant relationship to return. Therefore, the optimal proportion of top executives to board of directors, proportion of independent directors to the board of directors and the number of board of directors are suggested for further study. These would increase knowledge and can be applied for increasing firm value. The inclusion of appropriate control variables should also be further examined.

References

Aggarwal, P. (2013). *Impact of Corporate Governance on Corporate Financial Performance*. Retrieved January, 2013, from https://www.researchgate.net/publication/272984490_Impact_of_Corporate_Governance_on_Corporate_Financial_Performance

Amihud, Y., & Baruch, L. (1981). Risk reduction as a managerial motive for conglomerate mergers, *Bell Jounral of* Economices*, 12,* 605–617.

Chantakhet, N. (2011). *A Study of the Relationship between Corporate Governance and Operating Results of the Listed Companies in the Stock Exchange of Thailand, SET 100 Group.* Retrieved May 7, 2013, from http://eprints.utcc.ac.th/90/37/90fulltext.pdf

Chen, J. (2019). *Corporate Governance Definition.* Retrieved April 18, 2019, from https://www.investopedia.com/terms/c/corporategovernance.asp

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial* Economics*, 3,* 305–360.

Kaseamsap, W. (2010). *Corporate Governance and Firm Performance.* Retrieved 2011, from http://digital.library.tu.ac.th/tu_dc/frontend/Info/item/dc:121933

Kerdmun, S., Pongsupatt, T., & Chataccaraphat, P. (2014). *The Relationship of Corporate Governance with Stock Market Return and Firm Value of Companies Listed on the Stock Exchange of Thailand.* Retrieved November 12, 2014, from https://www.scribd.com/document/246366773/The–Relationship–of–Corporate–Governance–with–Stock–Market–Return–and–Firm–Value–of–Companies–Listed–on–the–Stock–Exchange–of–Thailand

Kouwenberg, R. (2006). *Better Governance = Better Performance*. Retrieved December, 2006, from https://www.set.or.th/sustainable_dev/th/cg/files/doc_seminar/2006/CG_Excec_Sum_v3_DrRoy.pdf

Rebeiz, K.S., & Salameh, Z. (2001) *Relationship between Governance Structure and Financial Performance in Construction.* Retrieved January, 2006, from https://www.researchgate.net/publication/245298446_Relationship_between_Governance_Structure_and_Financial_Performance_in_Construction

Stanley C. Vance. (1978). Corporate governance: Assessing corporate performance by boardroom attributes, *Journal of Business Research*, *6*(3), 203–220.

Thai Institute of Directors. (2019). *Roles and responsibilities of the board*. Retrieved 2019, from https://www.thai-iod.com/th/publications-detail.asp?id=432

The Stock Exchange of Thailand. (2012). *The Principle of Good Corporate Governance for Listed Companies 2012*. Retrieved May, 2012, from https://www.set.or.th/sustainable_dev/en/cg/principle_p1.html

Tonks, I, & Goergen, M, (2019). Introduction to special issue on sustainable corporate governance, *British Journal of Management*, *30*, 1–7.

Untong, A. (2007). *Handbook Eviews Basic Econometrics*. Retrieved 2007, from https://piboonrungroj.*files.wordpress.com/2011/08/akarapong_handbook_eviews_basic_econometrics.pdf*