# CORPORATE GOVERNANCE STRUCTURES AND STOCK RETURNS: EVIDENCE FROM THE STOCK EXCHANGE OF THAILAND

## โครงสร้างบรรษัทภิบาลกับราคาหุ้น
## กรณีศึกษา บริษัทในตลาดหลักทรัพย์แห่งประเทศไทย

รสิตา สังข์บุญนาค วันชัย ประเสริฐศรี

Rasita Sangboonnak[1], Wanchai Prasertsri[2]

## Abstract

The purpose of this research is to examine the relationship of corporate governance practices of the firm and its stock performance on the Stock Exchange of Thailand (SET). The sample included non-financial firms listed on the SET (2014-2015) (n = 257 firms). Data was collected from the SET's SETSMART database, including stock return information and corporate governance and ownership structure information. The predictor variables included board structure variables (board size, CEO duality, board independence, gender diversity, meeting frequency, & CEO compensation) and ownership structure variables (family ownership, institutional ownership, & ownership concentration). The multiple regression model was relatively weak ($R^2$ = .141). Gender diversity showed a strong positive effect on stock returns, while the effects of board size (negative) and institutional ownership (positive) were weaker. The implication is that these elements of corporate governance do not have a strong effect on stock returns in Thailand.

**Keywords:** Corporate Governance, Stock Returns, Agency Theory

## บทคัดย่อ

งานวิจัยนี้มีวัตถุประสงค์เพื่อทดสอบความสัมพันธ์ระหว่างหลักการกำกับดูแลกิจการของกลุ่มตัวอย่างและราคาหุ้นในตลาดหลักทรัพย์แห่งประเทศไทย กลุ่มตัวอย่าง ได้แก่ กลุ่มตัวอย่างที่ไม่ใช่สถาบันการเงินและมีรายชื่อในตลาดหลักทรัพย์แห่งประเทศไทย (ในปี ค.ศ. 2014 – 2015) (n = 257 ตัวอย่าง) โดยรวบรวมข้อมูลจากฐานข้อมูล SETSMART รวมทั้งข้อมูลผลตอบแทนหุ้นและข้อมูลการกำกับดูแลกิจการและ

---

[1] Faculty of Business Administration, Rajamanggala University of Technology Thanyaburi, The corresponding author, E-mail Address: rasita_s@maill.rmutt.ac.th

[2] Faculty of Business Administration, Rajamanggala University of Technology Thanyaburi E-mail Address: wanchai_p@rmutt.ac.th

โครงสร้างการถือหุ้น ตัวแปรพยากรณ์ ประกอบด้วย ตัวแปรโครงสร้างของคณะกรรมการ (ขนาด
คณะกรรมการ, การควบตำแหน่งประธานกรรมการกับ CEO, สัดส่วนกรรมการอิสระ, ความแตกต่างทางด้าน
เพศ, ความถี่ในการประชุม และค่าตอบแทนผู้บริหาร) และตัวแปรโครงสร้างการถือหุ้น (การถือหุ้นแบบ
ครอบครัว, การถือหุ้นแบบสถาบัน และ การถือหุ้นแบบกระจุกตัว) ผลการวิเคราะห์การถดถอยพหุคูณ พบว่า
มีความสัมพันธ์ระหว่างตัวแปรน้อย (R$^2$ = .141) ความแตกต่างทางด้านเพศของคณะกรรมการ มีผลกระทบ
เชิงบวกต่อผลตอบแทนหุ้นในระดับสูง ในขณะที่ผลกระทบด้านขนาดคณะกรรมการ (เชิงลบ) และการถือหุ้น
แบบสถาบัน (เชิงบวก) มีผลกระทบต่อผลตอบแทนหุ้นในระดับน้อย การนำผลวิจัยครั้งนี้ไปใช้ คือ
องค์ประกอบของการกำกับดูแลกิจการไม่มีผลกระทบในระดับสูงที่ส่งผลต่อผลตอบแทนหุ้นในประเทศไทย

**คำสำคัญ:** การกำกับดูแลกิจการ ผลตอบแทนหุ้น ทฤษฎีหน่วยงาน

## Introduction

Corporate governance is one of the most pre-eminent institutional norms of the modern business world. Agency theory, which addresses the problem of separation of ownership and control, was first proposed as the basis for corporate governance in the 1970s (Jensen & Meckling, 1976) and has been commonly used since the 1980s (Eisenhardt, 1989). Under agency theory, corporate governance principles and practices represent monitoring costs, or the costs to the principal to ensure that the managers of the firm (the agents) are aligned to and acting in the interest of the owners of the firm (the principals) (Shapiro, 2005). In other words, the corporate governance structures and practices of the firm are intended to ensure that the firm will be managed in the interests of its beneficial owners, rather than the self-interest of its managers (Shapiro, 2005). The disclosure and transparency requirements of corporate governance also serve to correct the information asymmetry that is inherent in the organization's control, by requiring that material information is disclosed accurately and completely, reducing the ability of management to use information asymmetries in their own interest (Shapiro, 2005).

Corporate governance is a broad set of practices, which range from legal and regulatory compliance to the firm's corporate social responsibility (CSR) activities to the structure of the firm's oversight and ownership. This research focuses on the board structure and ownership structure. The board of directors is the main governing body of the firm, providing oversight and monitoring of the managerial activities along with specialist knowledge and insight (Calder, 2008; Fernando, 2011). The board has a fiduciary duty to the owners of the firm (shareholders) to ensure that the firm is being managed in their interests (Calder, 2008). The ownership structure relates to the division of ownership between different classes of owners, such as families, institutions, & single large shareholders, along with concentration of ownership among individual owners (Bhagat & Jefferis, 2002; Calder, 2008). Ownership structure can influence the firm's operations in several ways, including direct board representation (Finkelstein, Hambrick, & Cannella, 2009) and conflicts of interests between ownership classes, which may direct or influence management decision making (Huang, 2006).

This study takes place on firms in the Stock Exchange of Thailand (SET), Thailand's exchange for publicly traded firms. Firms on the SET have specific corporate governance obligations, set out in the *Principles of Good Corporate Governance* and enforced on a comply-or-explain basis (Stock Exchange of Thailand, 2013). However, firms do still have some leeway in interpretation of these principles, which means that there is variation in the design and use of corporate governance structures, as well as ownership structures. There has been little, if any, research into the effects of board structure and ownership structure on the SET, although studies have taken place in nearby exchanges such as the Singapore Stock Exchange (Kang, Ding, & Charoenwong, 2010). Thus, there is a gap in the research regarding the influence of these areas of corporate governance on the firm's performance.

The purpose of this research was to examine the relationship of corporate governance practices of the firm and its stock performance, using the SET as the basis for the study. The study focuses on two aspects of corporate governance, including board structure and ownership structure. The main objectives of the research included establishing theoretical foundations for such relationships and empirically examining the relationships between stock returns and board structure (board size, board independence, CEO duality, gender diversity, & frequency of board meetings) and ownership structure (institutional ownership, ownership concentration, family ownership).

## Literature Review

### Board structure

There are six factors examined in relation to board structure. These include board size, CEO duality, board independence, gender diversity, board meeting frequency, & CEO compensation.

Several studies have examined board size in relation to the firm's stock returns, with often conflicting findings (Behlkir, 2009; Di Pietra, Grambovas, Raonic, & Riccaboni, 2008; Garg, 2007; Guest, 2009; Jackling & Johl, 2009; Pham, Suchard, & Zein, 2011). Behlkir (2009) and Jackling and Johl (2009) found small positive effects of board size on stock returns, while di Pietra, et al. (2008) found a limited effect in only some industries (particularly manufacturing). However, other studies that were reviewed found significant and much larger negative effects of board size on the firm's stock returns (Garg, 2007; Guest, 2009; Pham, et al., 2011). This does suggest that while there could be a positive effect, there could also be a negative effect, & the reasons for the difference in direction and magnitude of these effects is unclear. A negative effect of board size could be related to formation of politeness norms, which prevent effective board oversight and action (Garg, 2007). This research assumes that the relationship will be negative:

*Hypothesis 1: Board size has a negative effect on stock returns.*

CEO duality is another aspect of board structure that could influence stock returns according to several studies (Behlkir, 2009; Braun & Sharma, 2007; Combs, Ketchen, Perryman, & Donahue, 2007; Jackling & Johl, 2009). CEO duality, or the situation where the CEO and

Chairperson roles in the firm are held by the same person, increases the potential for self-dealing because a single individual has control over the firm's oversight and management (Braun & Sharma, 2007). In theory, CEO duality could lead to poor corporate governance and negative returns (Calder, 2008), but the actual evidence is mixed. Three of the four studies reviewed here did not find a significant effect in either direction of CEO duality on stock returns (Behlkir, 2009; Braun & Sharma, 2007; Jackling & Johl, 2009). Combs, et al. (2007) did find a positive significant effect of CEO duality on stock returns, but their study used a noticeably different research model of an event study of performance following unexpected CEO death. While for this study a positive effect is assumed, this may vary:

*Hypothesis 2:* CEO duality has a positive effect on stock returns.

The third board structure factor considered is board independence, or the number of outside directors (Behlkir, 2009; Garg, 2007; Jackling & Johl, 2009; Koerniadi & Tourani-Rad, 2012; O'Connell & Cramer, 2010; Pham, Suchard, & Zein, 2011). Board independence is believed to benefit the firm's operations because outside board members do not have a self-interest in the performance of the firm (Calder, 2008). An alternative theory holds that outside board members may not benefit the firm's performance because they lack specific knowledge and expertise in the firm's operations (Koerniadi & Tourani-Rad, 2012). However, as with other factors, the actual effect of board independence is very mixed. Several studies have found that there is no significant effect of board independence on the firm's stock returns (Behlkir, 2009; Garg, 2007; Jackling & Johl, 2009; O'Connell & Cramer, 2010). One study conducted in New Zealand did find a significant negative effect (Koerniadi & Tourani-Rad, 2012), but a study conducted in Australia showed there was a significant positive effect (Pham, et al., 2011). This study assumes a positive effect:

*Hypothesis 3:* Board independence has a positive effect on stock returns.

The fourth factor considered is gender diversity, which is frequently studied on its own rather than as part of the general board structure (Campbell & Vera, 2010; Carter, D'Souza, Simkins, & Simpson, 2010; Chapple & Humphrey, 2014; Gallego-Álvarez, García-Sánchez, & Rodríguez-Dominguez, 2010; Kang, Ding, & Charoenwong, 2010). Gender diversity studies show a lot of differences in both their methods and findings, but in general there is a positive trend in the findings. For example, Campbell and Vera (2010) showed a significant positive effect on the firm's Tobin's q measure of stock performance, while Kang, et al. (2010) showed positive investor response to appointment of female directors. However, not all studies showed positive findings on stock returns (Carter, et al., 2010; Chapple, & Humphrey, 2014; Gallego-Álvarez, et al., 2010). This research assumes there will be a positive effect of gender diversity on stock returns:

*Hypothesis 4:* Gender diversity has a positive effect on stock returns.

Next we consider board meeting frequency (Brick & Chidambaran, 2010; Gallego-Álvarez, García-Sánchez, & Rodríguez-Dominguez, 2010; Jackling & Johl, 2009; Vafeas, 1999). The frequency of board meetings is important because a more engaged board, which meets more

frequently, can provide more effective oversight (Calder, 2008). Of the studies reviewed, Jackling and Johl (2009) did not find a significant effect of board meeting frequency on stock returns, but Brick and Chidambaran (2010) and Gallego-Álvarez, et al. (2010) did find a significant and positive (though typically small) effect. The difference may be explained by Vafeas (1999), who observed that firms tend to increase their meeting frequency when the firm encounters difficulties; in other words, firms have more meetings *because* they are struggling, they do not struggle because of more board meetings. Thus, it can be assumed that board meeting frequency will have a positive effect on stock returns across the market:

*Hypothesis 5: Board meeting frequency has a positive effect on stock returns.*

The final aspect of board structure we consider is the CEO compensation strategy. In theory, CEO compensation serves to align the interests of the firm's manager with that of the board by ensuring that at least part of their own remuneration is tied to the firm's stock performance (Calder, 2008). As with gender diversity, this aspect is typically studied separately from other dimensions (Core, Holthausen, & Larcker, 1999; Frydman & Jenter, 2010; Habib & Ljungqvist, 2005). These studies have shown that the relationship of CEO compensation and firm performance is complicated. Core, et al. (1999) found a negative effect of CEO compensation on stock performance, which they attributed jointly to poor corporate governance. Another study found that CEO stock holding had a positive effect on stock performance, but CEO stock option grants had a negative effect (Habib & Ljungqvist, 2005). Frydman and Jenter (2010) suggested that this mixture of findings could be due to endogeneity of managerial ownership and stock performance, leading to an unstable relationship. This study assumes a positive relationship:

*Hypothesis 6: CEO compensation has a positive effect on stock returns.*

### Ownership structure

Three ownership structure dimensions are considered, including family ownership, institutional ownership, & ownership concentration.

Family ownership could potentially have a positive effect on stock ownership, but it also creates an opportunity for internal self-dealing (Anderson, Reeb, & Zhao, 2012). There is evidence that family ownership has positive effects on operational performance indicators such as ROE and ROA (Sraer & Thesmar, 2007). However, evidence mainly points to a negative relationship to stock returns. Only one study that was reviewed had evidence for direct positive effects of family ownership on stock performance (Perrini, Rossi, & Rovetta, 2008). Anderson, et al. (2012) noted that there was strong evidence in US markets for short dealing ahead of negative announcements in firms with high family ownership, indicating an increased rate of insider trading compared to non-family firms. Another study showed that family firms have worse stock performance and worse investment during crisis periods than non-family firms (Lins, Volpin, & Wagner, 2013). In Braun and Sharma's (2007) study, family ownership was found to have negative effects on stock performance

in non-dual firms. Thus, the majority of the evidence points to a negative effect of family ownership on the stock returns of publicly listed firms, which is the hypothesis of this study:

*Hypothesis 7: Family ownership has a negative effect on stock returns.*

The second ownership structure is institutional ownership, which is examined because of the power and knowledge of institutional shareholders (Calder, 2008). Empirical findings for this relationship have been mixed and limited. Institutional ownership has been shown to have a limited effect on stock performance in Egypt, although this could be due to the nature of institutional ownership within the country (Azzam, 2010). Some studies have shown that institutional owner participation reduces volatility of stock returns, creating a stabilizing effect (Bohl, Brzeszczynski, & Wilfling, 2009), although this could vary depending on whether the firm pays dividends or not (Rubin & Smith, 2009). Specifically, dividend-paying firms may have increased stock volatility under conditions of high institutional ownership (Rubin & Smith, 2009). Across a wide time period, there may not be a consistent effect (Chuang, 2015). However, the question of institutional ownership and stock returns is not settled. Here, we assume a positive relationship:

*Hypothesis 8: Institutional ownership has a positive effect on stock returns.*

Finally, ownership concentration is considered. Ownership concentration has been examined relatively infrequently compared to other types of ownership blocks, & is defined in widely varying ways (Azzam, 2010; Bai, Liu, Lu, Song, & Zhang, 2004; Perrini, Rossi, & Rovetta, 2008). There is also some inconsistency in these studies. Azzam (2010) found that public ownership concentration had no effect, although private ownership concentration had a significant negative effect on payout ratio and risk. Bai, et al. (2004), who studied China, found that ownership concentration had a significant positive effect on the firm's stock return performance. Perrini, et al. (2008) also found a significant positive effect on the stock return performance of firms on the Italian stock market. Thus, the bulk of evidence in this study points to a positive effect of ownership concentration on stock performance:

*Hypothesis 9: Ownership concentration has a positive effect on stock returns.*

### Conceptual Framework

The conceptual framework (Figure 1) includes five hypotheses related to board structure and three hypotheses related to ownership structure. It also includes three control variables, including firm size (SIZE), leverage (LEV), & use of a Big Four auditor (BIG4), which were identified as potentially significant confounding factors in earlier studies (Beekes, Pope, & Young, 2004; Coles, Daniel, & Naveen, 2008; Guest, 2009; Jackling & Johl, 2009; Ntim & Osei, 2011).

**Figure 1**: Conceptual framework of the research
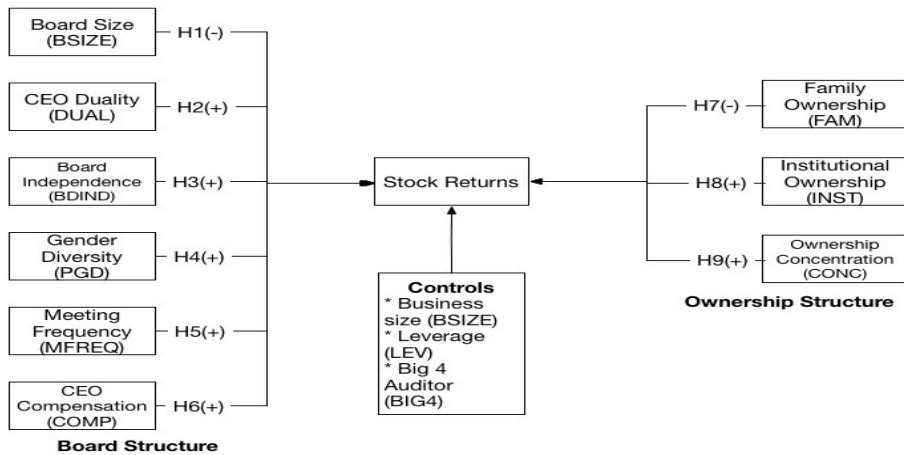


## Research Methodology

### Sampling and data sources

The study was conducted as a cross-sectional study of non-financial firms listed on the SET (2014-2015). The initial sample size included 1,094 firm-years (between 537 and 557 firms). Financial firms were excluded because of different patterns of regulatory enforcement and asset holding compared to non-financial firms (Calder, 2008), eliminating 118 firm-years. The sample also excluded firms that were delisted voluntarily or due to SET action, which included 16 firms. Finally, the sample excluded any firms that were not available during both years due to listing during 2015, leaving a population size of N = 461 firms. A priori analysis using G*Power 3 determined that the minimum sample size for linear multiple regression using the proposed model required a sample size of n = 249 members. A total sample size of n = 257 members was selected. The sample was selected randomly from the firms listed in alphabetical order and arranged by industry. A quota sampling approach was used to ensure representation of firms within the industry clusters used by SET in the sample.

Data was collected from two sources. The source of firm ownership and board structure data was Form 56-1. The Form 56-1 filing is the mandatory financial reporting and disclosure document required on an annual basis for all firms listed on the SET (SET, n.d.). The form includes information including ownership structure and board activities. Data on stock returns was selected from the SET's historic stock performance records. The SETSMART database provides access to both the Form 56-1 and stock returns for each firm listed on the exchange, along with other filings, regulatory action announcements and other data. As the SETSMART database serves as the public record for the firm's performance, this can be considered a reliable source of public information. The dataset was quality-checked by hand following preparation.

## Measures

**Table 1** Summary of measures for variables included in model

| Variable | Abbreviation | Measurement or Calculation |
|---|---|---|
| Board Size | LogBSIZE | Log (Board members) |
| Board Independence | PBDIND | %Independent board members |
| CEO Duality | DUAL | Dummy variable (0 = CEO duality is not present, 1 = Otherwise) |
| Gender Diversity | PGD | %Female directors |
| Meeting Frequency | MFREQ | Annual Board Meetings |
| CEO Compensation | LogCOMP | Log (Total executive compensation) |
| Institutional Ownership | INST | %Institutional ownership |
| Family Ownership | FAM | %Founder and family ownership |
| Ownership Concentration | CONC | %Ownership by largest shareholder |
| Stock Returns | SR | $SR = In \frac{P_1}{P_0}$, where $P_0$ = initial share price, $P_1$ = share price at the end of the period; Calculated daily following Brown and Warner (1985) |
| Firm Size | SIZE | Log (Total Assets) |
| Leverage | LEV (LogLEV) | Ratio of Total Debt to Total Equity |
| Large Audit Firm | BIG4 | Dummy variable (0 if firm does not use KPMG, PwC, E&Y or Deloitte, 1 otherwise) |

### Analysis technique

Analysis was conducted using multiple linear regression. Multiple linear regression techniques allow for identification of effects of two or more predictor variables and one outcome variable (Hair, Anderson, Black, & Babin, 2016). Regression was selected for two reasons. First, it has been used in most earlier studies addressing the same question. Second, alternative approaches such as structural equation modelling (SEM) were unnecessary given that the variables were discrete and clearly defined.

The standard linear regression equation of the form

$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n$ (Hair, et al., 2016) was used in the analysis.

The regression equation for the model was based on the conceptual framework as presented above, & was specified as:

$$Y_{SR} = \beta_0 + \beta_1 LogBSIZE + \beta_2 PBDIND + \beta_3 DUAL + \beta_4 PGD + \beta_5 MFREQ$$
$$+ \beta_6 LogCOMP + \beta_7 INST + \beta_8 CONC + \beta_9 FAM$$
$$+ \beta_{10} LogSIZE + \beta_{11} LogLEV + \beta_{12} BIG4$$

Regression was conducted in SPSS Version 24. Descriptive statistics were also calculated for each of the variables, which provides information about the shape of the distributions. Hypotheses are tested based on $p < 0.05$ for t-tests of individual variables.

## Results and Discussion

### Descriptive statistics and normality

The descriptive statistics of the study are shown below (Table 2). Most of the variables fall between the expected range of skewness and kurtosis ($\pm 2$), indicating a normal distribution. PBDIND, MFREQ, LogLEV, & SR have kurtosis >2, indicating a slightly platykurtic distribution. However, because these values are not very high above the expected range and the skewness indicated a close to symmetric distribution, the analysis proceeded as planned.

**Table 2** Descriptive statistics

| | Minimum | Maximum | Mean | Std. Deviation | Skewness | | Kurtosis | |
|---|---|---|---|---|---|---|---|---|
| | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. Error |
| BSIZE | 5 | 21 | 10.39 | 2.420 | 1.033 | .152 | 1.525 | .303 |
| LogBSIZE | .699 | 1.322 | 1.006 | .09639 | .314 | .152 | .281 | .303 |
| PBDIND | .273 | .846 | .406 | .0908 | 1.602 | .152 | **3.618** | .303 |
| DUAL | 0 | 1 | .19 | .390 | 1.617 | .152 | .619 | .303 |
| PGD | 0.000 | .625 | .174 | .1498 | .780 | .152 | -.111 | .303 |
| MFREQ | 4 | 25 | 8.16 | 4.140 | 1.368 | .152 | **2.114** | .303 |
| LogCOMP | 6.250 | 8.637 | 7.448 | .3830 | .046 | .152 | .607 | .303 |
| INST | 0.000 | 99.123 | 34.168 | 28.8705 | .492 | .152 | -1.019 | .303 |
| CONC | 0.000 | 74.59 | 17.950 | 16.6802 | 1.170 | .152 | .876 | .303 |
| FAM | 0.000 | 84.9 | 21.750 | 22.4461 | .875 | .152 | -.137 | .303 |
| LogSIZE | 8.670 | 11.939 | 9.742 | .6452 | .781 | .152 | .422 | .303 |
| LogLEV | -6.098 | 2.588 | -.586 | 1.4000 | -1.428 | .152 | **3.300** | .303 |
| BIG4 | 0 | 1 | .67 | .470 | -.743 | .152 | -1.460 | .303 |
| SR | -1.458 | .596 | -.120 | .3069 | -.966 | .152 | **2.489** | .303 |

### Regression analysis

The regression analysis (Table 2) examined the proposed model. The model's goodness of fit was relatively low ($R^2$ = 0.141), although it was significant. The Durbin-Watson statistic (2.162)

indicated that there was no significant positive or negative autocorrelation within the model. The full regression equation may be expressed as:

$$Y_{SR} = -1.205 + .096 LogBSIZE + .097 PBDIND + .041 DUAL \\ + .276 PGD. -.011 MFREQ + .035 LogCOMP + .002 NST \\ + .002 CONC + .000 FAM + .064 LogSIZE + .025 LogLEV \\ + .036 BIG4$$

**Table 3** Regression coefficients: Stock Returns (SR) model

| | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|---|---|---|---|---|---|
| | **B** | **Beta** | **Beta** | | |
| (Constant) | -1.205 | .429 | | -2.809 | .005 |
| LogBSIZE | .096 | .220 | .030 | .436 | .663 |
| PBDIND | .097 | .218 | .029 | .445 | .657 |
| DUAL | .041 | .048 | .052 | .841 | .401 |
| PGD | .276 | .131 | .135 | 2.110 | .036 |
| MFREQ | -.011 | .005 | -.150 | -2.276 | .024 |
| LogCOMP | .035 | .062 | .043 | .560 | .576 |
| INST | .002 | .001 | .175 | 2.227 | .027 |
| CONC | .002 | .001 | .091 | 1.407 | .161 |
| FAM | 6.416E-05 | .001 | .005 | .063 | .950 |
| LogSIZE | .064 | .044 | .134 | 1.459 | .146 |
| LogLEV | .025 | .014 | .114 | 1.764 | .079 |
| BIG4 | .036 | .044 | .056 | .817 | .415 |
| Model Statistics | | | | | |
| R | .376 | F | | Std. Residual | |
| $R^2$ | .141 | Sig. | .000 | Min | -4.368 |
| Adj. $R^2$ | .099 | | | Max | 2.714 |
| S.E. of Estimate | .291 | | | Mean | .000 |
| Durbin-Watson | 2.162 | | | S.D. | .976 |

**Hypothesis outcomes**

Hypotheses are assessed based on the significance and coefficient of each of the variables in the multiple regression model (Table 4). As this summary shows, the majority of hypotheses were rejected due to non-significance. Hypothesis 5 (concerning meeting frequency) was rejected because while it was significant, a negative relationship rather than a positive

relationship was observed. Only hypotheses 4 (gender diversity) and 8 (institutional ownership) could be accepted, with gender diversity having noticeably the strongest effect out of all of those studied.

**Table 4** Summary of hypothesis outcomes

| Hypothesis | Independent Variable | Coefficient (B) | T-test significance | Accepted? |
|---|---|---|---|---|
| 1 | BSIZE (-) | .096 | .663 | No |
| 2 | DUAL (+) | .041 | .401 | No |
| 3 | BDIND (+) | .097 | .657 | No |
| 4 | PGD (+) | .276 | .036 | Yes |
| 5 | MFREQ (+) | -.011 | .024 | No |
| 6 | COMP (+) | .062 | .576 | No |
| 7 | FAM (-) | .000 | .950 | No |
| 8 | INST (+) | .002 | .027 | Yes |
| 9 | CONC (+) | .002 | .161 | No |

## Discussion

The hypothesis tests do not show that board structure or ownership structure have much effect on the firm, with even the significant factors having a limited effect. This could be explained in several ways. For example, in the case of board meeting frequency, it is possible that a negative effect is seen rather than a positive effect because Thai firms tend to increase board meeting frequency when the firm is having difficulties, which has been observed in other markets (Vafeas, 1999). It is also possible that the board structure factors do not have much influence because the majority of firms are following the *Principles of Good Corporate Governance* (Stock Exchange of Thailand, 2013), which are generally required for firms in Thailand. For example, the descriptive statistics show that most firms do not have a dual CEO. The descriptive statistics also show that firm concentration of ownership, family ownership and institutional ownership are relatively low, which could limit their effects since no shareholder would be able to capture a significant amount of power within the board. Furthermore, the model's low goodness of fit (indicating low predictive power) could be a reason for the seeming lack of importance of these factors. It is also worth noticing that many of the studies that were reviewed had conflicting and contradictory findings, which in at least some cases may be due to endogeneity of the variables and stock returns or non-linear distributions of these variables (Frydman & Jenter, 2010). This creates a difficult analysis problem that may only yield to more complex analytical approaches.

The importance of the gender diversity variable is the strongest finding of this study. Gender diversity has been identified with different positive effects within the firm, including increased skills and viewpoints and reduced risk, as female-led firms tend to be perceived as less risky by investors (Kang, et al., 2010). This study has provided positive evidence for the impact of

female directors on stock returns in Thailand, which contradicts several previous studies that have not found such an effect (Carter, et al., 2010; Chapple, & Humphrey, 2014; Gallego-Álvarez, et al., 2010). To some extent, this could be due to cultural differences in investor expectation within a given market, which could influence the effect of female directorship (Kang, et al., 2010). This study's findings do support a positive effect, but they also suggest that more research is needed to clarify the role of gender diversity on the firm's stock performance and the mechanisms by which this effect occurs, & to standardize measures of gender diversity, which could also help clarify findings.

## Conclusion and Recommendations

This research has studied the role of two dimensions of corporate governance – board structure and ownership structure – on the stock performance of non-financial firms on the SET (2014-2015). The study had limited significant findings, showing that only board gender diversity (positive), meeting frequency (negative), & institutional ownership (positive) had significant effects. Furthermore, the effect of meeting frequency and institutional ownership was very small, with only gender diversity having a medium effects size. In conclusion, there is some limited evidence that board structure and ownership structure do influence the firm's stock returns, but there is more research required to confirm these effects.

There were some significant limitations to this research. The short time frame (2014 to 2015) limited the number of firm-years in the study, which could be the cause of the relatively small effects size observed. The study was also not designed as a time series, which could be a useful strategy for understanding effects that occur over time. (For example, it could determine if poor stock performance in one period precipitated increased board meetings in another period.) As with most such studies, the research was also limited geographically, with only firms from Thailand included. This is due to the need to standardize the institutional framework and reporting mechanisms. Finally, the exploration of causal mechanisms, such as the nature of institutional ownership in Thailand and the extent of institutional or large block holder activism, was outside the scope of this study.

There are several opportunities for further research inherent in this study. The most obvious area is further research into the SET firms and the role of corporate governance, for example by including more corporate governance dimensions and using a longer time period and a time series approach if appropriate. However, there are also theoretical issues that need to be addressed. For example, research could be conducted to help move toward consensus definitions for factors like gender diversity and ownership concentration, which would increase the comparability of studies in this area. More extensive research into specific aspects of corporate governance to help untangle endogenous relationships could also help improve the quality of research in this area. Furthermore, cross-country comparisons could help provide a more

comprehensive understanding of how corporate governance principles and structures influence the firm's stock performance.

In conclusion, this study has shown a weak relationship between board structure and ownership structure dimensions of corporate governance and the firm's stock returns. There are still significant theoretical and empirical questions remaining, some of which are very complicated and which may not yield easily to quantitative analysis without a stronger basis in theory. At the same time, the theory of corporate governance has proved to be weak in actual prediction of the firm's stock performance, suggesting that the theory of corporate governance itself requires some refinement. While there is some evidence that corporate governance practices and structures do influence the firm's performance, this evidence is far from complete. Thus, even though this has been a topic of concern over time, it still calls for more research, both theoretical and empirical.

## References

Anderson, R., Reeb, D., & Zhao, W. (2012). Family controlled firms and informed trading: evidence from short sales. *The Journal of Finance*, *67* (1), 351-385.

Azzam, I. (2010). The impact of institutional ownership and dividend policy on stock price and volatility: Evidence from Egypt. *International Journal of Business*, *15* (4), 444-458.

Bai, C. E., Liu, Q., Lu, J., Song, F. M., & Zhang, J. (2004). Corporate governance and market valuation in China. *Journal of Comparative Economics*, *32* (4), 599-616.

Beekes, W., Pope, P., & Young, S. (2004). The link between earnings timeliness, earnings conservatism and board composition: Evidence from the UK. *Corporate Governance*, *12* (1), 47-59.

Behlkir, M. (2009). Board of director's size and performance in banking industry. *International Journal of Managerial Finance*, *5* (2), 201-221.

Bhagat, S., & Jefferis, R. H. (2002). *The econometrics of corporate governance studies.* Cambridge, MA: MIT Press.

Bohl, M. T., Brzeszczynski, J., & Wilfling, B. (2009). Institutional investors and stock returns volatility; Empirical evidence from a natural experiment. *Journal of Financial Stability*, *5* (2), 170-182.

Braun, M., & Sharma, A. (2007). Should the CEO also be chair of the board? An empirical examination of family-controlled public firms. *Family Business Review*, *XX* (2), 111-126.

Brick, I. E., & Chidambaran, N. K. (2010). Board meetings, commitee structure, & firm value. *Journal of Corporate Finance*, *16*, 533-553.

Brown, S. J., & Warner, J. B. (1985). Using daily stock returns: The case of event studies. *Journal of Financial Economics*, *14* (1), 3-31.

Calder, A. (2008). *Corporate governance: A practical guide to the legal frameworks and international codes of practice.* Philadelphia, PA: Kogan Page.

Campbell, K., & Vera, A. M. (2010). Female board appointments and firm valuation: Short and long-term effects. *Journal of Management and Governance*, *14*, 37-59.

Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The gender and ethnic diversity of US boards and board committees and firm financial performance. *Corporate Governance: An International Review*, *18* (5), 396-414.

Chapple, L., & Humphrey, J. E. (2014). Does board gender diversity have a financial impact? Evidence using stock portfolio performance. *Journal of Business Ethics*, *122* (4), 709-723.

Chuang, H. (2015). *Institutional ownership and stock returns (Data Science and Service Research Discussion Paper)*. Retrieved from Tohuku University: http://www.econ.tohoku.ac.jp/econ/datascience/DDSR-DP/no47.pdf

Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does one size fit all? *Journal of Financial Economics*, *87*, 329-356.

Combs, J. G., Ketchen, D. J., Perryman, A. A., & Donahue, M. S. (2007). The moderating effect of CEO power on the board composition-firm performance relationship. *Journal of Management Studies*, *44* (8), 1299-1323.

Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation and firm performance. *Journal of Financial Economics*, *51*, 371-406.

Di Pietra, R., Grambovas, C. A., Raonic, I., & Riccaboni, A. (2008). The effects of board size and 'busy' directors on the market value of Italian companies. *Journal of Management Governance*, *12*, 73-91.

Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, *14* (1), 57-74.

Fernando, A. C. (2011). *Corporate governance: Principles, policies and practices.* New York: Pearson.

Finkelstein, S., Hambrick, D. C., & Cannella, A. A. (2009). *Strategic leadership: Theory and research on executives, top management teams, & boards.* Oxford, UK: Oxford University Press.

Frydman, C., & Jenter, D. (2010). CEO compensation. *Annual Review of Financial Economics*, *2*, 75-102.

Gallego-Álvarez, I., García-Sánchez, I. M., & Rodríguez-Dominguez, L. (2010). The influence of gender diversity on corporate performance. *Revista de Contabilidad - Spanish Accounting Review*, *13* (1), 53-88.

Garg, A. K. (2007). Influence of board size and independence on firm performance: A study of Indian companies. *Vikalpa*, *32* (3), 39-60.

Guest, P. M. (2009). The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance*, *15* (4), 385-404.

Habib, M. A., & Ljungqvist, A. (2005). Firm value and managerial incentives: A stochastic frontier approach. *The Journal of Business*, *78* (6), 2053-2094.

Hair, J., Anderson, R., Black, B., & Babin, B. (2016). *Multivariate data analysis.* New York: Pearson Higher Education.

Huang, G. (2006). The determinants of capital structure: Evidence from China. *China Economic Review*, *17* (1), 14-36.

Jackling, B., & Johl, S. (2009). Board structure and firm performance: Evidence from India's top companies. *Corporate Governance: An International Review*, *17* (4), 492-509.

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.

Kang, E., Ding, D. K., & Charoenwong, C. (2010). Investor reaction to women directors. *Journal of Business Research*, *63* (8), 888-894.

Koerniadi, H., & Tourani-Rad, A. (2012). Does board independence matter? Evidence from New Zealand. *Australasian Accounting, Business and Finance Journal*, *6* (2), 3-18.

Lins, K. V., Volpin, P., & Wagner, H. F. (2013). Does family control matter? International evidence from the 2008-2009 financial crisis. *Review fo Financial Studies*, *26* (10), 2583-2619.

Ntim, C. G., & Osei, N. A. (2011). The impact of corporate board meetings on corporate performance in South Africa. *African Review of Economics and Finance*, *2* (2), 83-103.

O'Connell, V., & Cramer, N. (2010). The relationship between firm performance and board characteristics in Ireland. *European Management Journal*, *28*, 387-399.

Perrini, F., Rossi, G., & Rovetta, B. (2008). Does ownership structure affect performance? Evidence from the Italian market. *Corporate Governance*, *16* (4), 312-325.

Pham, P. K., Suchard, J., & Zein, J. (2011). Corporate governance and alternative performance measures: Evidence from Australian firms. *Australian Journal of Management*, *36* (3), 371-386.

Rubin, A., & Smith, D. R. (2009). Institutional ownership, volatility and dividends. *Journal of Banking and Finance*, *33* (4), 627-639.

SET. (n.d.). *Information disclosure*. Retrieved from Stock Exchange of Thailand (SET): http://www.set.or.th/en/regulations/supervision/listed_disclosure_p5.html

Shapiro, S. P. (2005). Agency Theory. *Annual Review of Sociology*, *31*, 263-284.

Sraer, D., & Thesmar, D. (2007). Performance and behavior of family firms: Evidence from the French stock market. *Journal of the European Economic Association*, *5* (4), 709-751.

Stock Exchange of Thailand. (2013). *The Principle of Good Corporate Governance for Listed Companies*. Retrieved from Stock Exchange of Thailand: https://www.set.or.th/sustainable_dev/en/cg/principle_p1.html

Vafeas, N. (1999). Board meeting frequency and firm performance. *Journal of Financial Economics*, *53* (1), 113-142.