Corporate Governance, Board Effectiveness, and Performance of Thai Listed Firms

Mongkon Laoworapong Somchai Supattarakul Fredric William Swierczek⁺

ABSTRACT

This study develops board effectiveness measurement and examines the relationship between corporate governance, board effectiveness, and firm performance (Tobin's Q and ROAs) of Thai listed firms. The sample comprises 146 directors from Thai listed firms. Corporate governance includes percentage of blockholders, multiple directorships, and board compensation, which are investigated by using secondary data of Thai listed firms. Board effectiveness (including determinants on board strategic and monitoring actions) was assessed by a survey of CEOs and independent directors. The influence of corporate governance and board effectiveness was examined on firm performance using structural equation modeling. Results indicate positive associations between high percentage of blockholders and long-term firm value. High board compensation is also positively related to long-term firm value. Operational Review is the most important in board effectiveness and increases current year performance and long-term firm value. By contrast, Strategic Framework decreases current year performance. Board-CEO-Performance reduces long-term firm value. These results suggest that the combination of corporate governance and board effectiveness improve firm performance. The findings confirm the important role of board of directors in corporate governance.

Keywords: Board Characteristics, Board Effectiveness, Board of Directors, Corporate Governance, Firm Performance.

บทคัดย่อ

งานวิจัยนี้พัฒนาตัวชี้วัดประสิทธิผลของกรรมการบริหาร และศึกษาความสัมพันธ์ระหว่างการกำกับดูแลกิจการ ประสิทธิผลของกรรมการ และผลการดำเนินงาน (มูลค่ากิจการและอัตราผลตอบแทนของสินทรัพย์) ของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย การวิจัย-นี้ได้เก็บรวบรวมข้อมูลจากกรรมการของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทยจำนวน 146 ท่าน ปัจจัยด้านการกำกับดูแลกิจการใด้แก่ สัดส่วนของผู้ถือหุ้นที่มีนัยสำคัญ การเป็นกรรมการในหลายกิจการ และผลตอบแทนกรรมการ วิเคราะห์จากเอกสารที่เกี่ยวข้องของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย ประสิทธิผลของกรรมการด้านกลยุทธ์และด้านกำกับดูแล ประมวลผลจากแบบสอบถามของกรรมการผู้จัดการและกรรมการอิสระ ความสัมพันธ์ระหว่างการกำกับดูแลกิจการ ประสิทธิผลของกรรมการ และผลการดำเนินงาน มีความสัมพันธ์ในทิศทางเดียวกันผลตอบแทนกรรมการมีความสัมพันธ์ในทิศทางเดียวกันกับมูลค่ากิจการ การสอบทานผลประกอบการมีความสำคัญมากที่สุดในปัจจัยประสิทธิผลของกรรมการด้านกำกับดูแล และมีความสัมพันธ์ในทิศทางเดียวกันกับมูลค่ากิจการและอัตราผลตอบแทนของสินทรัพย์ ในทางตรงกันข้ามกรอบงานด้านกลยุทธ์มีความสัมพันธ์ในทิศทางตรงข้ามกับอัตราผลตอบแทนของสินทรัพย์ การประเมินผลกรรมการและกรรมการผู้จัดการมีความสัมพันธ์ในทิศทางตรงข้ามกับอัตราผลตอบแทนของสินทรัพย์ การประเมินผลกรรมการและกรรมการผู้จัดการมีความสัมพันธ์ในทิสทางตรงข้ามกับอัตราผลตอบแทนของสินทรัพย์ การประเมินผลกรรมการและประสิทธิผลของกรรมการ ส่งผลให้กิจการมีผลการดำเนินงานดีขึ้น ผลการศึกษานี้สนับสนุนบทบาทของกรรมการในการกำกับดูแลกิจการ

<mark>คำสำคัญ:</mark> ลักษณะของกรรมการ, ประสิทธิผลของกรรมการ, คณะกรรมการ, การกำกับคุแลกิจการ, ผลการดำเนินงานของกิจการ

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Dr. Mongkon Laoworapong is a lecturer at the Thammasat Business School, Thammasat University, 12 Prachan Road, Phra Nakhon, Bangkok 10200, Thailand. Email: mongkon.laoworapong@gmail.com. Dr. Somchai Supattarakul is an assistant professor at the Thammasat Business School. Email: ssomchai@tu.ac.th. Dr. Frederic William Swierczek is an associate professor at the Thammasat Business School. Email: fredric@tu.ac.th.

INTRODUCTION

Corporate governance strengthens firm performance (O'Donovan, 2003). Regulators provide best practices guidelines in corporate governance principles such as shareholder structure and board characteristics. The responsibility of the board is a major OECD corporate governance principle. The three major roles of boards of directors are policy setting, monitoring, and assuring accountability of the company to shareholders (OECD, 2004). The board of directors is the key to implement good corporate governance (John & Senbet, 1998; Urapeepatanapong, 2006; Bhagat & Bolton, 2008).

Research on boards of directors typically investigates board characteristics and firm performance (Choi, Park, & Yoo, 2006; Andres & Vallelado, 2008; Jackling & Johl, 2009). There has been limited research on board effectiveness and its relationship to firm performance. Moreover, prior research results on corporate governance, board effectiveness, and firm performance are mixed and inconclusive (Brennan, 2006; Shank, Paul, & Stang, 2013). The mixed findings relate to differences in definitions, measurement, and time periods (Shank et al., 2013). These inconclusive results need further investigation (Sami, Wang, & Zhou, 2011; Shank et al., 2013).

In this paper, we therefore examine the relationship between corporate governance, board effectiveness, and firm performance (Tobin's Q and ROAs) of Thai listed firms. Our board effectiveness indicators are collected from a sample of directors of listed firms in Thailand, while corporate governance attributes and firm performance are compiled from secondary data of these firms whose directors participate in the survey.

LITERATURE REVIEW

Corporate Governance Principles and Firm Performance

In general, two types of corporate governance approaches are adopted in prior studies. The first approach uses a composite measure of corporate governance (Core, Guay, & Rusticus, 2006; Bebchuk, Cohen, & Ferrell, 2008; Bhagat & Bolton, 2008). The second approach focuses on corporate governance attributes related to firm performance. These include ownership structure (e.g. share of blockholders), board effectiveness, as well as board characteristics such as board size, board composition, multiple directorships, board compensation, and board meeting frequency (Brennan, 2006; Choi et al., 2006; Andres & Vallelado, 2008). This paper uses the corporate-attribute approach to examine corporate governance.

The blockholders and firm performance

There is a strong relationship between ownership structure and performance (Hermalin & Weisbach, 1991; Mitton, 2001). Concentrated ownership has a long-term effect on performance (Demb & Neubauer, 1992). The degree of ownership concentration measures the ability of shareholders to influence managers (Thomsen & Pedersen, 2007). Diffuse ownership gives shareholders less power to constrain professional management (Berle & Means, 1933). The more concentrated the ownership, the greater the degree to which benefits and costs are borne by the same owner (Demsetz & Lehn, 1985). In addition, shareholders with the large percentages of shares facilitate corporate governance since they are more motivated to monitor management (Maher & Andersson, 1999; Vafeas, 1999). However, Thomsen, Pedersen, and Kvist (2006) found a negative association between blockholder ownership and firm value, and Andres (2008)

argued that blockholders either affect firm performance adversely or have no influence on performance.

Multiple directorships and firm performance

Directors with multiple appointments have major networks and can increase firm value by accessing resources, suppliers and new customers for the corporation (Mizruchi & Stearns, 1994; Kiel & Nicholson, 2006; Jackling & Johl, 2009). They have a positive impact on firm performance (Ferris, Jagannathan, & Pritchard, 2003; Harris & Shimizu, 2004; Pieta, Grambovas, Raonic, & Riccaboni, 2008). However, more appointments can lead to over commitment and compromise the board members' ability to monitor effectively which adversely affects firm value (Fich & Shivdasani, 2006; McIntyre, Murphy, & Mitchell, 2007). Other research finds no relationship between multiple directorships and firm financial performance (Kiel & Nicholson, 2006). There has been limited research on multiple directorships in related and non-related companies. Multiple directorships in related companies are considered a conflict of interest. Board involvement in related companies is negative. However, multiple directorships in non-related companies add expertise and business relationships that improve firm performance.

Board compensation and firm performance

Higher board compensation is strongly related to ineffective monitoring and weaker corporate governance (Basu, Hwang, Mitsudome, & Weintrop, 2007; Brick, Palmon, & Wald, 2006; Core, Holthausen, & Larcker, 1999). In contrast, the level of compensation received by the directors has a positive influence on firm performance (Urquhart, 2014). However, Doucouliagos, Askary, and Haman (2006) argued that there is no significant relationship between directors' pay and firm performance.

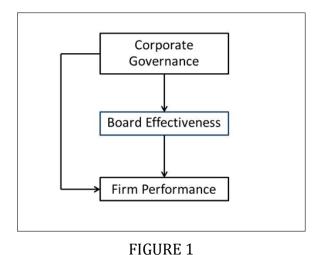
Board Effectiveness and Firm Performance

Board effectiveness should increase firm performance (Brennan, 2006). Because of limited studies on board effectiveness, there are insufficient empirical findings to fully establish a causal relationship between board effectiveness and organizational performance (Schmidt & Brauer, 2006). Board strategic actions and board monitoring actions are important board effectiveness determinants (Brennan, 2006; Basu et al., 2007; Duchin, Matsusaka, & Ozbas, 2009). The strategic actions refer to strategy implementation, risk management, stakeholders' expectation, board involvement in CEO selection, setting strategic planning, CEO replacement, and providing assurance to shareholders and stakeholders (Brennan, 2006; Basu et al., 2007; Payne, Benson, & Finegold, 2009). The monitoring actions refer to boardroom performance, corporate performance measurement, communication policy, coaching the CEO and management team, monitoring and assessing CEO performance and compensation (Zona & Zattoni, 2007).

CONCEPTUAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Figure 1 presents the empirical model reflecting the related literature and research that show the relationship between corporate governance attributes, board effectiveness and firm performance. According to the model, our hypotheses are as follows.

- Corporate governance attributes (shareholders and board of director characteristics) have a direct effect on firm performance.
- Board effectiveness determinants directly influence firm performance.
- By increasing board effectiveness, corporate governance attributes also have a positive effect on firm performance.



Conceptual Framework

Referring to the conceptual framework, the specific corporate governance attributes include blockholders, multiple directorships in related and non-related companies, and board compensation. Blockholders (BLOCK) represents the percentage of shareholding of shareholders who hold more than 10% shares. The number of multiple directorships in related companies (MULTI_RELATED) and non-related companies (MULTI_NON) are classified into 3 groups: (i) 0 company; (ii) 1-3 companies; (iii) more than 3 companies. Board compensation (BCOMPEN) is measured by overall director annual remuneration including bonuses. Board effectiveness variables (BE) include board strategic actions and monitoring actions (Basu et al., 2007; Brennan, 2006; Duchin et al., 2009). Board effectiveness is the degree to which boards perform actions to achieve strategic and monitoring responsibilities. The board effectiveness variables are based on prior literature (Brennan, 2006; Zona & Zattoni, 2007). Strategic actions involve activities related to strategies and good governance such as strategic risk assessment, and evaluating strategic options. Monitoring actions are related to CEO replacement, dividend policy recommendations, reviews of action plans and budgets, and board performance assessments. Firm performance is measured by approximated Tobin's Q and ROA. ROA is backward-looking, whereas Tobin's O is forward-looking. Tobin's O is also a marketbased performance measure (Demsetz & Villalonga, 2001). This study uses the approximated Tobin's Q ratio due to limited data and the inactive Thai debt market. The approximated Tobin's Q ratio is highly correlated with the original version of Tobin's Q (Perfect & Wiles, 1994).

RESEARCH METHODOLOGY

The samples comprise both primary and secondary data. The data on board effectiveness come from a survey of directors of Thai listed companies. Questionnaires were mailed to CEOs and independent directors of all listed firms, approximately 485 CEOs and 1,455 independent directors. The final respondents include 44 CEOs and 102 inde-

pendent directors. That is, the response rate is approximately 10%. The sample represents 65 SET listed and 29 MAI listed firms. On the other hand, the data on corporate governance and firm performance are obtained from the annual report and form 56-1 as of December 31, 2011.

We use structural equation modeling (SEM) to examine the relationship between corporate governance attributes, board strategic actions, and board monitoring actions on firm performance as measured by Tobin's Q and ROA (as dependent variables). Reliability and correlation analysis are performed through regression analysis. Variable description, measurement, and sources are summarized in Table 1.

TABLE 1
Variable Description and Sources

Variable	Description	Source
TOBIN's Q	A market-based performance mesured from a ratio between market value of equity plus book value of debt and replacement (book value of asset).	SETSMART
ROA	An accounting measure of profitability calculated from a ratio between net income divided by total assets.	SETSMART
BLOCK	Total percentage shareholdings of the shareholders who hold share > 10%	Annual report or form 56-1
MULTI_RE	The number of directorships that firm directors accept on other related company boards: (i) 0 company, (ii) 1-3 companies, (iii) more than 3 companies.	Survey and validated with secondary data
MULTI_NON	The number of directorships that firm directors accept on other non-related company boards: (i) 0 company, (ii) 1-3 companies, (iii) more than 3 companies.	Survey and validated with secondary data
BCOMPEN	Directors' annual remuneration including fees for attending meetings and bonuses.	Annual report or form 56-1
BE	(Surveyed) board effictiveness in strategy actions and monitoring actions.	Survey

TABLE 2

Descriptive Statistics on Corporate Governance Attributes

Variables	N		Minimum	Maximum	Mean	S.D.
Firm Performance						
Tobin's Q	146		0.51	5.36	1.43	0.82
ROA (%)	146		-49.59	41.68	9.55	9.8
Corporate Governance Attributes						
Percentage of Blockholders	146		0	94.66	47.32	20.98
Number of Members in the Board of Directors (BOD)	146		6	18	10.3	2.49
BOD Independence	146		26.67%	87.50%	41.60%	0.09
Director Compensation	146		0.41m	88.41m	8.35m	13.17m
Number of BOD Meetings	146		4	24	7.46	3.71
Control Variables						
Total Assets	146		0.26m	2,106.91m	82.46m	316.69m
CAPINT (%)	146		0	0.91	0.27	0.24
Firm Age (years)	146		5	105	28.33	16.65
Number of Directors Having Directorships in Other						_
Companies	N	0 Firms	1-3 Firms	> 3 Firms	Mean	S.D.
Multiple Directorship in Non-related Company	146	101	28	17	1.42	0.69
Multiple Directorship in Related Company	146	51	54	41	1.93	0.79

RESULTS

Descriptive Statistics

Table 2 reports the approximate Tobin's Q ranges from 0.51 to 5.36 with an average of 1.43. There are 48 firms or 32.21% of the sample having approximate Tobin's Q higher than the mean score. The return on assets (ROA) ranges from -49.59% (having a net loss) to 41.68% with an average of 9.57% (that is, profit is 9.57% of total assets for an average firm in the sample). In addition, the percentage of blockholders ranges from 0% to 94.66%, with the mean of 47.32%. The number of board members ranges from 6 to 18 directors, with an average of 10.30 directors. The share of independent board members ranges from 27% to 88%, with an average of 42%. Director compensation in 2011 ranges from THB 0.4 million to THB 88.4 million, with the mean of THB 8.3 million. The number of board meetings ranges from 4 to 24 meetings, with the mean of 7.46 per years. The figure for SET listed firm ranges from 4 meetings to 24 meetings, with an average of 8.02 meetings, while the figure for MAI listed firm ranges from 4 meetings to 19 meetings, with average of 6.36 meetings.

TABLE 3

Descriptive Statistics on Board Effectiveness

		Least	Less	(3)	(4)	Most		
		Impor-	Impor-	Neu-	Impor-	Impor-		
Variables	N	tant	tant	tral	tant	tant	Mean	S.D.
Strategic Action Variables								
S1: Articulates shareholders' objectives	146	2	3	13	52	76	4.35	0.84
S2: Frames the "vision" of the business according to shareholders' objectives	146	2	3	16	48	77	4.34	0.86
S3: Frames the "objectives" of the business according to shareholders' objectives	146	2	2	15	61	66	4.28	0.81
S4: Frames the procedures for strategic planning	146	1	6	26	67	46	4.03	0.85
S5: Frames the procedures for strategic risk assessment	146		5	20	61	60	4.21	8.0
S6: Receives proper strategic information in sufficient time	146		3	20	54	69	4.29	0.78
S7: Has enough time to review the firm's strategic plan	146		4	18	63	61	4.24	0.77
S8: contributes to the strategic development of the firm	146		2	24	61	59	4.21	0.76
S9: Analyzes the firm's weakness and strength	146		5	17	68	56	4.2	0.78
S10: Analyzes the firm's strategic gaps	146	2	4	27	74	39	3.99	0.83
S11: Evaluates the firm's strategic results	146	2	3	25	70	46	4.06	0.83
S12: Selects and replaces CEO	146	7	11	23	39	66	4	1.16
S13: Advises management in the final selection of a firm's strategy	146	2	3	17	75	49	4.14	0.8
S14: Approves the firm's strategic plan	146	2	2	9	63	70	4.35	0.78
S15: Evaluates the firm's strategic results	146		3	14	71	58	4.26	0.72
S16: Identifies strategc divergences	146	2	8	25	80	31	3.89	0.85
S17: Analyzes alternatives to manage strategic divergences	146	2	11	21	82	30	3.87	0.87
Monitoring Action Variables								
M1: Assures shareholders' objectives are met	146	4	1	6	56	79	4.4	0.84
M2: Protects shareholders' interests	146	2		5	33	106	4.65	0.68
M3: Recommends the dividends policy	146	3	2	17	63	61	4.21	0.86
M4: Limits the corporate risk	146		3	14	59	70	4.34	0.74
M5: Guides CEO to achieve the corporate objectives	146	1	2	22	76	45	4.11	0.75
M6: Assures the execution of strategy	146		5	19	83	39	4.07	0.73
M7: Reviews plan and budget	146		4	19	61	62	4.24	0.78
M8: Approves and monitors important decisions	146		2	14	52	78	5.41	0.72
M10: Assesses and rewards CEO	146	5	7	25	57	52	3.99	1.02
M11: Implements CEO succession planning	146	5	7	20	61	53	4.03	1
M12: Reviews the top executives impact on firm performance	146	4	8	29	65	40	3.88	0.97
M13: Analyzes performance and evaluates information	146		4	24	70	48	4.11	0.77
M14: Assesses board performance	146	4	3	20	57	62	4.16	0.93
M15: Implements board succession planning	146	4	9	30	57	46	3.9	1.01
M16: Review social responsibility performance and sustainability of the firm	146	1	8	29	58	50	4.01	0.91

Table 3 presents descriptive statistics on board effectiveness. In terms of board strategic actions, the responses from the director survey suggest that directors must articu-

late shareholders' objectives (the highest mean score of 4.34). They must also approve the firm's strategic plan (mean score of 4.34), frame the vision of the business (mean score of 4.32), and frame the objectives of the business according to shareholders' objectives (mean score of 4.28). Moreover, directors must receive proper strategic information in sufficient time (mean score of 4.26), and evaluate the firm's strategic results (mean score of 4.26).

As for the best practice in monitoring, boards of directors must always remind shareholders objectives, approve important decision, and review firm performance against action plans and budgets. The survey respondents indicate that directors must protect shareholders' interest (mean score of 4.64) and assure that shareholders' objectives are met (mean score 4.41). Directors must also approve and monitor important decisions (mean score 4.40), limit the corporate risk (mean score 4.33), and review corporate plans and budgets (mean score 4.24). Monitoring roles are performed during board and sub-committee meetings.

Factor Analysis

A factor analysis is applied to provide more specific indicators of the Board Effectiveness. A confirmatory factor analysis tests the theoretical framework from our literature review. Table 4 displays the factor loadings for the strategic action variables. There are 3 new factors, *Strategic Formulation, Strategic Approval*, and *Strategic Framework*, as the most important variables based on the eigenvalues. Table 5 reports the factor analysis of the monitoring action variables. There are 2 factors *Board-CEO-Performance* and *Operational Review* as the most important factors.

TABLE 4
Factor Analysis of Strategic Actions

Variables	Eigenvalues	Total	Component
Strategic Formulation	8.705	51.208	
S10: Analyzes the firm's strategic gaps			0.802
S9: Analyzes the firm's weakness and strength			0.802
S8: Contributes to the strategic development of the firm			0.771
S16: Identifies strategic divergences			0.758
S5: Frames the procedures for strategic risk assessment			0.732
S17: Aanlyzes alternatives to manage strategic divergences			0.726
S4: Frames the procedures for strategic planning			0.623
S11: Evaluates strategic options			0.591
Strategic Approval	1.899	11.172	
S14: Approves the firm's strategic plan			0.801
S13: Advises management in the final selection of a firm's strategy			0.782
S15: Evaluates the firm's strategic results			0.686
S6: Receives proper strategic information in sufficient time			0.585
S12: Selects and replaces CEO			0.573
Strategic Framework	1.161	6.832	
S2: Frames the "vision" of the business according to shareholders' objectives			0.873
S3: Frames the "objectives" of the business according to shareholders' objectives			0.856
S1: Articulates shareholders' objectives			0.780

Reliability

To test the reliability of the Board Effectiveness variables, Cronbach's alpha was used. The reliability of Board Effectiveness was high since the Cronbach's Alpha is 0.938 for the Strategic Actions and 0.926 for the Monitoring Actions.

New Variables: Strategic Actions and Monitoring Actions

Table 6 presents the mean scores of the new strategic action variables and monitoring action variables. The new variables are created by a summated mean score of strategic action and monitoring action factors analyzed separately.

TABLE 5
Factor Analysis of Monitoring Actions

Variables	Eigenvalues	Total	Component
Board-CEO-Performance	7.427	49.514	
M10: Assesses and rewards CEO			0.873
M11: Implements CEO succession planning			0.857
M15: Implements board succession planning			0.843
M12: Reviews the top executives impact on firm performance			0.735
M14: Assesses board performance			0.732
M16: Reviews social responsibility performance and sustainability of the firm			0.602
M4: Limits the corporate risk			0.535
M5: Guides CEO to achieve the corporate objectives			0.5
Operational Review	1.575	10.503	
M1: Assures shareholders' objectives are met			0.75
M8: Approves and monitors important decisions			0.73
M7: Reviews plan and budget			0.72
M2: Protects shareholders' interests			0.707
M6: Assures the execution of strategy			0.683
M13: Analyzes performance and evaluates information			0.676
M3: Recommends the dividends policy			0.621

TABLE 6
Mean Scores of Board Effectiveness

Variables	Mean	S.D.
Strategic Formulation	4.0523	0.6748
Strategic Approval	4.1954	0.6670
Strategic Framework	4.3157	0.7422
Board-CEO-Performance	4.0416	0.7212
Operational Review	4.2914	0.5780

Evaluating the Fit of the Model: Tobin's Q

The values of the model are chi-square $\chi 2 = 6.604$ with p-value = 0.359; degrees of freedom = 6; CMINDF = 1.101; goodness of fit index (GFI) = 0.992; normed fit index (NFI) = 0.988; and root mean square error of approximation (RMSEA) = 0.026. The model is consistent with regard to the fit value (Hair et al., 2010). Tobin's Q is explained by variables in the model, measured by Squared Multiple Correlations = 0.222. Figure 2 shows the standardized parameter values among the observed variables.

Table 7 reports the regression weights and the standardized regression weights on four corporate governance attributes as well as five overall mean scores of strategic actions and monitoring actions (as independent variables) and their impact on Tobin's Q.

The table significant standardized regression weights of 0.338 (p = 0.000**) for blockholders to Tobin's Q, 0.154 (p = 0.046**) for board compensation to Tobin's Q. Results between corporate governance and board effectiveness are 0.186 (p = 0.016**) for blockholders and Strategic Formulation, 0.202 (p = 0.010**) for blockholders and Strategic Approval, and 0.131 (p = 0.099*) for blockholders and Operational Review.

The standardized regression weights between multiple directorships in related companies and *Strategic Framework* is 0.143 (p = 0.081*). The standardized regression weights between board compensation and board effectiveness measures are 0.292 (p = 0.000**) for board compensation and *Strategic Formulation*, 0.249 (p = 0.001**) for board compensation and *Strategic Approval*, 0.222 (p = 0.005**) for board compensation and *Operational Review*, and 0.176 (p = 0.029**) for board compensation and *Board-CEO-Performance*. The significant standardized regression weights are 0.375 (p = 0.005**) for *Operational Review* to Tobin's Q. However *Board-CEO-Performance* is negatively correlated with Tobin's Q with standardized regression weights -0.291 (p = 0.030**).

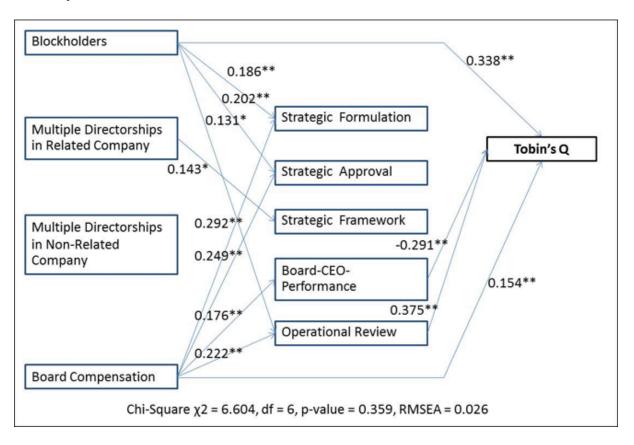


FIGURE 2

The Effects of Corporate Governance, Board Effectiveness, and Tobin's Q

Furthermore, blockholders have standardized direct effects on Tobin's Q=0.338; standardized indirect effects on Tobin's Q=0.013; and standardized total effects = 0.351. Thus, blockholders increase board effectiveness and have a positive impact Tobin's Q. Board compensation has standardized direct effects on Tobin's Q=0.154; standardized indirect effects on Tobin's Q=-0.009; and standardized total effects = 0.143. That is, board compensation improves Tobin's Q but reduces board effectiveness. Board-CEO-Performance has standardized direct effects on Tobin's Q=-0.291; standardized indirect effects on Tobin's Q=0.000; and standardized total effects = -0.291. Hence, Board-CEO-Performance is negatively correlated with Tobin's Q=0.000; and standardized indirect effects on Tobin's Q=0.375; standardized indirect effects on Tobin's Q=0.000; and standardized total effects = 0.375. In other words, Operational Review is positively correlated with Tobin's Q=0.000; and standardized with Tobin's Q=0.000; and standardized with Tobin's Q=0.000; and standardized total effects = 0.375. In other words, Operational Review is positively correlated with Tobin's Q=0.000; and standardized with Tobin's

TABLE 7
Standardized Regression Weights (Tobin's Q)

Variables	Estimate	Std-Est	S.E.	C.R.	P-level
Strategic Formulation <block< td=""><td>0.006</td><td>0.186</td><td>0.003</td><td>2.399</td><td>0.016**</td></block<>	0.006	0.186	0.003	2.399	0.016**
Strategic Approval <block< td=""><td>0.006</td><td>0.202</td><td>0.002</td><td>2.583</td><td>0.010**</td></block<>	0.006	0.202	0.002	2.583	0.010**
Strategic Framework <block< td=""><td>0.000</td><td>-0.006</td><td>0.003</td><td>-0.072</td><td>0.942</td></block<>	0.000	-0.006	0.003	-0.072	0.942
Board-CEO-Performance <block< td=""><td>0.002</td><td>0.047</td><td>0.003</td><td>0.581</td><td>0.561</td></block<>	0.002	0.047	0.003	0.581	0.561
Operational Review <block< td=""><td>0.004</td><td>0.131</td><td>0.002</td><td>1.651</td><td>0.099*</td></block<>	0.004	0.131	0.002	1.651	0.099*
Stratetic Formulation <multi_re< td=""><td>0.054</td><td>0.055</td><td>0.077</td><td>0.704</td><td>0.481</td></multi_re<>	0.054	0.055	0.077	0.704	0.481
Strategic Approval <multi_re< td=""><td>0.104</td><td>0.108</td><td>0.075</td><td>1.386</td><td>0.166</td></multi_re<>	0.104	0.108	0.075	1.386	0.166
Strategic Framework <multi_re< td=""><td>0.153</td><td>0.143</td><td>0.088</td><td>1.744</td><td>0.081*</td></multi_re<>	0.153	0.143	0.088	1.744	0.081*
Board-CEO-Performance <multi_re< td=""><td>0.111</td><td>0.108</td><td>0.083</td><td>1.333</td><td>0.182</td></multi_re<>	0.111	0.108	0.083	1.333	0.182
Operational Review <multi_re< td=""><td>0.086</td><td>0.103</td><td>0.066</td><td>1.293</td><td>0.196</td></multi_re<>	0.086	0.103	0.066	1.293	0.196
Stratetic Formulation <multi_non< td=""><td>-0.024</td><td>-0.028</td><td>0.067</td><td>-0.365</td><td>0.715</td></multi_non<>	-0.024	-0.028	0.067	-0.365	0.715
Strategic Approval <multi_non< td=""><td>0.027</td><td>0.032</td><td>0.065</td><td>0.413</td><td>0.680</td></multi_non<>	0.027	0.032	0.065	0.413	0.680
Strategic Framework <multi_non< td=""><td>0.023</td><td>0.025</td><td>0.077</td><td>0.304</td><td>0.761</td></multi_non<>	0.023	0.025	0.077	0.304	0.761
Board-CEO-Performance <multi_non< td=""><td>0.064</td><td>0.072</td><td>0.073</td><td>0.884</td><td>0.377</td></multi_non<>	0.064	0.072	0.073	0.884	0.377
Operational Review <multi_non< td=""><td>-0.057</td><td>-0.079</td><td>0.058</td><td>-0.988</td><td>0.323</td></multi_non<>	-0.057	-0.079	0.058	-0.988	0.323
Stratetic Formulation <bcompen< td=""><td>0.000</td><td>0.292</td><td>0.000</td><td>3.762</td><td>0.000**</td></bcompen<>	0.000	0.292	0.000	3.762	0.000**
Strategic Approval <bcompen< td=""><td>0.000</td><td>0.249</td><td>0.000</td><td>3.192</td><td>0.001**</td></bcompen<>	0.000	0.249	0.000	3.192	0.001**
Strategic Framework <bcompen< td=""><td>0.000</td><td>0.084</td><td>0.000</td><td>1.021</td><td>0.307</td></bcompen<>	0.000	0.084	0.000	1.021	0.307
Board-CEO-Performance <bcompen< td=""><td>0.000</td><td>0.176</td><td>0.000</td><td>2.180</td><td>0.029**</td></bcompen<>	0.000	0.176	0.000	2.180	0.029**
Operational Review <bcompen< td=""><td>0.000</td><td>0.222</td><td>0.000</td><td>2.791</td><td>0.005**</td></bcompen<>	0.000	0.222	0.000	2.791	0.005**
Tobin's Q <block< td=""><td>0.013</td><td>0.338</td><td>0.003</td><td>4.416</td><td>0.000**</td></block<>	0.013	0.338	0.003	4.416	0.000**
Tobin's Q <multi_re< td=""><td>0.008</td><td>0.007</td><td>0.088</td><td>0.092</td><td>0.927</td></multi_re<>	0.008	0.007	0.088	0.092	0.927
Tobin's Q <multi_non< td=""><td>0.097</td><td>0.094</td><td>0.077</td><td>1.260</td><td>0.208</td></multi_non<>	0.097	0.094	0.077	1.260	0.208
Tobin's Q <bcompen< td=""><td>0.000</td><td>0.154</td><td>0.000</td><td>1.991</td><td>0.046**</td></bcompen<>	0.000	0.154	0.000	1.991	0.046**
Tobin's Q <strategic formulation<="" td=""><td>-0.093</td><td>-0.077</td><td>0.153</td><td>-0.606</td><td>0.544</td></strategic>	-0.093	-0.077	0.153	-0.606	0.544
Tobin's Q <strategic approval<="" td=""><td>-0.055</td><td>-0.045</td><td>0.172</td><td>-0.320</td><td>0.849</td></strategic>	-0.055	-0.045	0.172	-0.320	0.849
Tobin's Q <strategic framework<="" td=""><td>-0.096</td><td>-0.087</td><td>0.108</td><td>-0.884</td><td>0.377</td></strategic>	-0.096	-0.087	0.108	-0.884	0.377
Tobin's Q <board-ceo-performance< td=""><td>-0.334</td><td>-0.291</td><td>0.154</td><td>-2.171</td><td>0.03**</td></board-ceo-performance<>	-0.334	-0.291	0.154	-2.171	0.03**
Tobin's Q <operational review<="" td=""><td>0.530</td><td>0.375</td><td>0.187</td><td>2.840</td><td>0.005**</td></operational>	0.530	0.375	0.187	2.840	0.005**

Note: *,** statistically significant at the 10% and 5% respectively

Evaluating the Fit of the Model: ROA

In this study, the measurements and structural models are estimated simultaneously. Board size, board independence, and the number of board meetings are not significant in the model, and hence have been removed from the model. The removed variable is based on Modification Indices and Standardized Residual Covariances. The adaptation value of the new model are chi-square $\chi 2 = 6.604$ with p-value = 0.359; degrees of freedom = 6; CMINDF = 1.101; goodness of fit index (GFI) = 0.992; normed fit index (NFI) = 0.988; and root mean square error of approximation (RMSEA) = 0.026. The model is consistent with regard to the fit value (Hair, Black, Babin, & Anderson, 2010). ROA is explained by variables in the model, measured by Squared Multiple Correlations = 0.146. Figure 3 shows the standardized parameter values among the observed variables.

Table 8 presents the regression weights and standardized regression weights on four corporate governance attributes, as well as five overall mean scores of strategic actions, and monitoring actions (as independent variables) and their effects on ROA. The table shows significant standardized regression weights of 0.299 (p = 0.000**) for

blockholders on ROA. Results between corporate governance and board effectiveness are 0.186 (p = 0.016**) for blockholders and *Strategic Formulation*, 0.202 (p = 0.010**) for blockholders and *Strategic Approval*, 0.131 (p = 0.099*) for blockholders and *Operational Review*, 0.143 (p = 0.081*) for multiple directorships in related companies and *Strategic Framework*, 0.292 (p = 0.000**) for board compensation and *Strategic Approval*, 0.222 (p = 0.005**) for board compensation and *Operational Review*, and 0.176 (p = 0.029**) for board compensation and *Board-CEO-Performance*. The significant standardized regression weights are 0.231 (p = 0.095*) for *Operational Review* to ROA. However, *Strategic Framework* is negatively correlated with ROA with standardized regression weights of 0.178 (p = 0.085*).

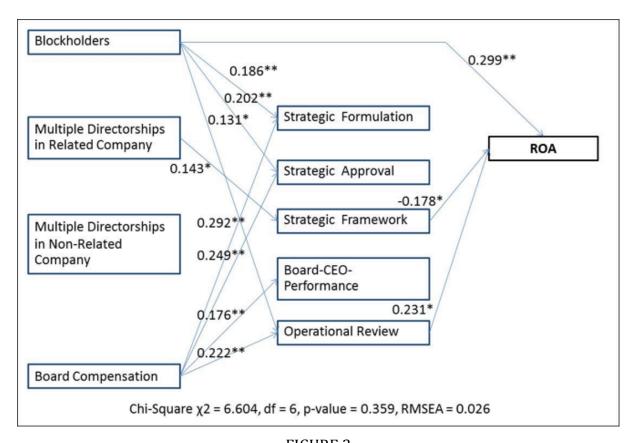


FIGURE 3

The Effects of Corporate Governance, Board Effectiveness, and ROA

According to the model, blockholders have standardized direct effects on ROA = 0.299; standardized indirect effects on ROA = -0.001; and standardized total effects = 0.298. That is, blockholders reduce board effectiveness but have a positive impact on ROA. *Operational Review* has standardized direct effects on ROA = 0.231; standardized indirect effects on ROA = 0.000; and standardized total effects = 0.231. As a result, *Operational Review* increases ROA. *Strategic Framework* has standardized direct effects on Tobin's Q = 0.000; and standardized total effects = -0.178; standardized indirect effects on Tobin's Q = 0.000; and standardized total effects = -0.178. *Strategic Framework* is therefore negatively correlated with ROA.

TABLE 8
Standardized Regression Weights (ROA)

Variables	Estimate	Std-Est	S.E.	C.R.	P-level
Strategic Formulation <block< td=""><td>0.006</td><td>0.186</td><td>0.003</td><td>2.399</td><td>0.016**</td></block<>	0.006	0.186	0.003	2.399	0.016**
Strategic Approval <block< td=""><td>0.006</td><td>0.202</td><td>0.002</td><td>2.583</td><td>0.010**</td></block<>	0.006	0.202	0.002	2.583	0.010**
Strategic Framework <block< td=""><td>0.000</td><td>-0.006</td><td>0.003</td><td>-0.072</td><td>0.942</td></block<>	0.000	-0.006	0.003	-0.072	0.942
Board-CEO-Performance <block< td=""><td>0.002</td><td>0.047</td><td>0.003</td><td>0.581</td><td>0.561</td></block<>	0.002	0.047	0.003	0.581	0.561
Operational Review <block< td=""><td>0.004</td><td>0.131</td><td>0.002</td><td>1.651</td><td>0.099*</td></block<>	0.004	0.131	0.002	1.651	0.099*
Stratetic Formulation <multi_re< td=""><td>0.054</td><td>0.055</td><td>0.077</td><td>0.704</td><td>0.481</td></multi_re<>	0.054	0.055	0.077	0.704	0.481
Strategic Approval <multi_re< td=""><td>0.104</td><td>0.108</td><td>0.075</td><td>1.386</td><td>0.166</td></multi_re<>	0.104	0.108	0.075	1.386	0.166
Strategic Framework <multi_re< td=""><td>0.153</td><td>0.143</td><td>0.088</td><td>1.744</td><td>0.081*</td></multi_re<>	0.153	0.143	0.088	1.744	0.081*
Board-CEO-Performance <multi_re< td=""><td>0.111</td><td>0.108</td><td>0.083</td><td>1.333</td><td>0.182</td></multi_re<>	0.111	0.108	0.083	1.333	0.182
Operational Review <multi_re< td=""><td>0.086</td><td>0.103</td><td>0.066</td><td>1.293</td><td>0.196</td></multi_re<>	0.086	0.103	0.066	1.293	0.196
Stratetic Formulation <multi_non< td=""><td>-0.024</td><td>-0.028</td><td>0.067</td><td>-0.365</td><td>0.715</td></multi_non<>	-0.024	-0.028	0.067	-0.365	0.715
Strategic Approval <multi_non< td=""><td>0.027</td><td>0.032</td><td>0.065</td><td>0.413</td><td>0.680</td></multi_non<>	0.027	0.032	0.065	0.413	0.680
Strategic Framework <multi_non< td=""><td>0.023</td><td>0.025</td><td>0.077</td><td>0.304</td><td>0.761</td></multi_non<>	0.023	0.025	0.077	0.304	0.761
Board-CEO-Performance <multi_non< td=""><td>0.064</td><td>0.072</td><td>0.073</td><td>0.884</td><td>0.377</td></multi_non<>	0.064	0.072	0.073	0.884	0.377
Operational Review <multi_non< td=""><td>-0.057</td><td>-0.079</td><td>0.058</td><td>-0.988</td><td>0.323</td></multi_non<>	-0.057	-0.079	0.058	-0.988	0.323
Stratetic Formulation <bcompen< td=""><td>0.000</td><td>0.292</td><td>0.000</td><td>3.762</td><td>0.000**</td></bcompen<>	0.000	0.292	0.000	3.762	0.000**
Strategic Approval <bcompen< td=""><td>0.000</td><td>0.249</td><td>0.000</td><td>3.192</td><td>0.001**</td></bcompen<>	0.000	0.249	0.000	3.192	0.001**
Strategic Framework <bcompen< td=""><td>0.000</td><td>0.084</td><td>0.000</td><td>1.021</td><td>0.307</td></bcompen<>	0.000	0.084	0.000	1.021	0.307
Board-CEO-Performance <bcompen< td=""><td>0.000</td><td>0.176</td><td>0.000</td><td>2.180</td><td>0.029**</td></bcompen<>	0.000	0.176	0.000	2.180	0.029**
Operational Review <bcompen< td=""><td>0.000</td><td>0.222</td><td>0.000</td><td>2.791</td><td>0.005**</td></bcompen<>	0.000	0.222	0.000	2.791	0.005**
Tobin's Q <block< td=""><td>0.140</td><td>0.299</td><td>0.038</td><td>3.731</td><td>0.000**</td></block<>	0.140	0.299	0.038	3.731	0.000**
Tobin's Q <multi_re< td=""><td>-0.495</td><td>-0.035</td><td>1.104</td><td>-0.449</td><td>0.654</td></multi_re<>	-0.495	-0.035	1.104	-0.449	0.654
Tobin's Q <multi_non< td=""><td>0.938</td><td>0.076</td><td>0.970</td><td>0.967</td><td>0.333</td></multi_non<>	0.938	0.076	0.970	0.967	0.333
Tobin's Q <bcompen< td=""><td>0.000</td><td>0.102</td><td>0.000</td><td>1.268</td><td>0.205</td></bcompen<>	0.000	0.102	0.000	1.268	0.205
Tobin's Q <strategic formulation<="" td=""><td>-0.674</td><td>-0.047</td><td>1.919</td><td>-0.351</td><td>0.726</td></strategic>	-0.674	-0.047	1.919	-0.351	0.726
Tobin's Q <strategic approval<="" td=""><td>-1.493</td><td>-0.101</td><td>2.162</td><td>-0.690</td><td>0.490</td></strategic>	-1.493	-0.101	2.162	-0.690	0.490
Tobin's Q <strategic framework<="" td=""><td>-2.350</td><td>-0.178</td><td>1.363</td><td>-1.725</td><td>0.085*</td></strategic>	-2.350	-0.178	1.363	-1.725	0.085*
Tobin's Q <board-ceo-performance< td=""><td>-1.008</td><td>-0.073</td><td>1.936</td><td>-0.521</td><td>0.602</td></board-ceo-performance<>	-1.008	-0.073	1.936	-0.521	0.602
Tobin's Q <operational review<="" td=""><td>3.920</td><td>0.231</td><td>2.348</td><td>1.670</td><td>0.095*</td></operational>	3.920	0.231	2.348	1.670	0.095*

Note: *,** statistically significant at the 10% and 5% respectively

DISCUSSION

The share of blockholders increases Tobin's Q and ROA. A higher percentage of blockholders means higher commitment, better control, and better shareholder protection. Larger blockholders strengthen shareholder power in the board. They provide resources and connections to the company, and also strengthen monitoring of management and control power of directors, resulting in higher ROA and Tobin's Q. The positive correlation between the percentage of blockholders and firm performance is consistent with results from prior studies of Demsetz and Lehn (1985), Hermalin and Weisbach (1991), and Mitton (2001). Surprisingly, our results show board compensation positively associates with higher firm performance (Tobin's Q). Better director compensation seems to motivate directors to contribute more to improve their firm performance. This finding is opposite to the findings of Core et al. (1999), Brick et al. (2006), and Basu et al. (2007). These studies find that higher board compensation leads to weak monitoring and corporate governance. However, our analysis found no significant relationships between multiple directorships in related and non-related companies with firm performance. The lack of significant relationship suggests that if outside expe-

rience leads to policies that deviate from the corporate plan, it would lead to lower firm performance. In addition, multiple directorships in related companies may create a conflict of interest in decision that results in an increased value in one company but a decreased value in another. Our finding is consistent with Kiel and Nicholson (2006).

Board strategic actions negatively influence Tobin's Q and ROA, but they not statistically significant except Strategic Framework on ROA. The negative impact on ROA suggests that without appropriate and updated information, the set framework could reduce the company competitiveness and reduce ROA. The non-significant relationships imply that due to limitation in engagement and information accessibility, board actions likely reconfirm the strategies proposed by management. Consensus leads to conformity between directors and management. Directors are very passive in the pro-forma view of strategy actions that does not affect performance (Tobin's Q or ROA). Board-CEO-Performance is negatively associated with Tobin's Q and ROA. The Western perspective appraises boards and CEOs as agents of shareholders. However, in an Asian (particularly the Thai) perspective, the board is more relationship oriented not being concerned with reviewing their real performance or that of the CEO. The negative coefficient suggests that the board of directors and CEO appraisal and succession plan may induce a conflict between directors and CEOs that reduces board effectiveness, that in turn has a negative impact on the firm performance. Operational Review has a significant positive effect on Tobin's Q and ROA. That is, Operational Review confirms the importance of monitoring for firm performance. An effective monitoring is the key factor of board effectiveness to improve firm performance. Operational Review represents a check and balance function in evaluating operating results and the financial position of the company. It provides a warning about corporate risks. *Operational Review* improves Tobin's Q and ROA.

Blockholders have a significant positive influence on *Strategic Formulation*, *Strategic Approval*, and *Operational Review*. A higher percentage of blockholders supports the board of directors in performing strategic actions in *Strategic Formulation* and *Strategic Approval*, and strengthens board monitoring actions in *Operational Review*. This suggests that blockholders influence strategy setting and approval, as well as monitoring operating results to their objectives. Multiple directorships in related companies positively influence *Strategic Framework*. Experience with related companies positively enhances strategic framework development. Board compensation positively correlates with *Strategic Formulation*, *Strategic Approval*, *Strategic Framework*, *Board-CEO-Performance*, and *Operational Review*. High director compensation motivates and presents respect to directors.

CONCLUSION AND RECOMMENDATIONS

This study investigates the effect of corporate governance and board effectiveness on firm performance in Thai listed firms. Their practices do conform to good corporate governance principles. Corporate governance principles and board effectiveness are interrelated. Our findings confirm that firms with better governance and high board effectiveness have a better performance. The empirical results identify *Strategic Formulation, Strategic Approval, Strategic Framework, Board-CEO-Performance,* and *Operational Review* as board effectiveness indicators.

Consistent with prior studies, our results indicate that Tobin's Q is influenced by the percentage of blockholders, board compensation, *Board-CEO-Performance*, and *Operational Review*. ROA is influenced by the percentage of blockholders, *Strategic Frame-*

work, and *Operational Review*. However, high board compensation positively associates with firm performance. This reveals an important governance gap between Thai practices and corporate governance principles. Blockholders positively associate with short term and long-term values. Higher board compensation positively associates with the long-term value. Moreover, the findings also show that *Operational Review* provides assurance of shareholders' objectives enhancing board effectiveness and increasing the short-term and long-term values. In contrast, *Strategic Framework* decreases the short-term value. *Board-CEO-Performance* weakens relationship between boards and CEOs, possibly reducing effectiveness and the long-term value.

The findings of this study may provide useful information for regulators and standard setters who are interested in improving the effectiveness of board of directors under the existing corporate governance context. Regulators could strengthen board effectiveness measurement by setting guidelines on board strategic actions and monitoring those enhancing firm performance. In addition, appropriate regulation on board compensation and CEO assessment must be reviewed carefully prior to the implementation. Proper involvement of regulators in corporate governance reform would enhance the ability of the board of directors as the main mechanism to improve corporate governance, and hence firm performance.

There are possible research extensions, particularly in the different level of share-holder structure and board characteristics, to better understand the variation in control that affects the value of the firm. A further empirical study of interaction between the shareholder structure, board characteristics, and board effectiveness would be useful to provide an insight into relationships between corporate governance and firm performance.

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