

# DOES CORPORATE GOVERNANCE STIMULATE FIRM PERFORMANCE? ASSESSING CORPORATE GOVERNANCE PRACTICES TOWARDS SOCIAL WELFARE

Zeshan Anwar and Dr. Bilal Aziz

## ABSTRACT

*The objective of this research is to determine the relationship between corporate governance practices and firm performance for the World's largest multinational companies in Asian countries for the period of 2008 to 2017 based on Agency Theory. The results demonstrate that the variables of board independence, audit committee independence, ownership concentration, CEO duality and return on assets have positive and significant relationship with firm's profitability, whereas, the variable of firm size has negative and significant correlation with profitability. Moreover, the endogeneity of the board structure variable was investigated by applying the Two Stage Least Squares (2SLS) regression model. The results of the 2SLS regression model depicts that variables of board independence, audit committee independence, ownership concentration, return on assets and volatility of stock prices have positive and significant association, whereas, the variable of firm size has negative and significant correlation with firm's profitability. These results are consistent with recommendations of Agency theory. Better governance practices consider interests of all stakeholders including efforts for improving lives and welfare of labor/workers/employees which ultimately leads towards social welfare of the society as a whole.*

**Keywords:** Corporate Governance; Firm's Profitability; Multinational Companies; Asian Countries; Social Welfare.

## INTRODUCTION

This paper studies association of corporate governance practices and business profitability by incorporating a sample of large multinationals in Asian

countries. There are several theories which point out association of governance practices with wealth of shareholders. The Stewardship theory recommends that governance is about maximization of shareholders wealth thus points out the link of governance with wealth of shareholders. The profitability is a fundamental factor of wealth creation. The debate regarding optimum capital structure also establishes the link of capital structure with profitability and wealth of shareholders. However, the association of governance practices with profitability for Asian countries has not been sufficiently investigated and several studies have pointed out the need for such kind of research.

This research empirically examines this issue by utilizing data from top multinational firms in Asian countries as empirical studies regarding governance practices are comparatively lesser for Asian countries and there is a gap in existing literature for effect of governance systems on business performance. These gaps in existing literature offer strong motivations to conduct this study as this study will bridge these gaps in empirical literature.

Henceforth, the study aimed at bridging this gap by investigating whether better governance practices could result in improving business performance by utilizing a sample of top multinational firms in 24 Asian countries from Year 2008 to Year 2017. This research conduct analysis to determine relationship of governance systems variables with business profitability and controlling for variables of level of leverage, firm size, ROA, and volatility of stock prices for top Asian multinational companies. The main objective of this research is to determine whether better governance practices results in increasing the firm's profitability.

Accordingly, the study on correlation of governance practices systems with business profitability in Asian economies will facilitate investors, policy makers and managers to have improved insights of governance practices role in organizations. Each of these multinational companies represents a unique economic situation. Moreover, as the companies included in the sample are giant multinationals and were ranked in top 2000 multinationals of the world by Forbes Magazine, therefore, findings of this research are extremely significant for policy makers and decision makers due to larger size, huge capitalization, and enormous resources of the sample multinational firms.

The remaining research has been organized as follows: the literature review has been presented in section 2; research methods: research framework has been provided in section 3. The section 4 presents results

for firm profitability and corporate governance practices, whereas, the section 5 provides conclusion and directions regarding future research.

### **LITERATURE REVIEW**

The corporate governance literature in developed and developing economies presented controversial results for correlation of corporate governance with financial performance of organizations (Coskun & Sayilir, 2012). Several studies analyzed relationship of corporate governance with business performance, but findings are not conclusive. Most of studies have supported positive association of governance practices with financial performance of companies e.g. Martani and Saputra (2009), utilized multiple regressions and mean equality test for examining impact of governance practices with business performance through Economic Value Added (EVA) and reported that corporate governance practices significantly influence EVA. But index of corporate governance is better in influencing ROE than EVA and ROA. Ivashkovskaya and Stepanova (2011), observed effect of board's activity, capital structure and ownership structure on business performance. The findings revealed that composition of board and investors having substantial voting power have positive relationship with business performance. Nuryanah and Islam (2011), assessed relationship of governance practices with performance of Indonesian organizations and disclosed that all internal governance systems excluding size of board and audit committee along with managerial ownership have significantly positive influence on firms' performance.

Ergin (2012), explored whether investors consider corporate governance ranking while assessing share price for period of 2006-2010. The accounting and financial performance were discovered to be positively and significantly affect corporate governance ranking. The corporate governance factors which have significant and positive connection with financial performance include public disclosure, stakeholders, and transparency.

Some researchers have also found negative association of governance practices with business profitability, Dogan et al. (2013), checked influence of CEO duality on organizational performance by utilizing sample of 204 firms in Istanbul from 2009 to 2010. The results found negative relation of CEO duality with firm performance. It is asserted that the stockholders will get higher returns in businesses which have separate

chairperson and CEO. Vintila and Gherghina (2012), observed association of corporate governance rating and business performance. The authors obtained negative association of business performance with global rating for corporate governance. The results also depicted negative relation of business performance with sub-indices of corporate governance.

Some researchers have also discovered neutral correlation of governance practices with firm performance. In this reference, Anum Mohd Ghazali (2010), estimated the influence of enforcement of new rules on business performance for Malaysian companies by using data for 87 listed firms for the years of 2001. The researcher concluded that no corporate governance factor was important in affecting business performance. Coskun and Sayilir (2012), explored correlation of corporate governance with profitability and value of Turkish companies and found insignificant association of corporate governance with financial performance. Stanwick and Stanwick (2010), observed whether better corporate governance provides higher performance as compared to weaker corporate governance by using data of 25 top and worst board of directors for Canadian companies in year 2007. The authors found that impact of board directors on organizational performance are mixed and obtained positive relation of board directors having higher level of accountability with company performance but obtained negative correlation of board independence with business performance. The study depicted that better corporate governance supports in improving financial performance of companies.

Hassan Al-Tamimi (2012), examined influence of governance practices on financial distress and performance of banks in UAE. The researcher discovered positive and significant relation of financial distress with corporate governance systems insignificant relation of corporate governance practices with performance level. Gill and Obradovich (2012), assessed influence of governance practices, financial leverage with firm value in America by utilizing data of 333 public listed firms for period 2009 to 2011. The results depicted that variables of insider ownership, audit committee, CEO duality, firm size, financial leverage, and ROA have positive influence on firms' value, whereas, larger size of boards have negative impact on firms' value in US.

Tornyeva and Wereko (2012), investigated correlation of corporate governance practices with performance of insurance firms during 2005-2009

for Ghana. The results showed that independent audit committees have positive association with performance of insurance businesses in Ghana. Hamdan et al. (2013), examined relation of independent audit committees with organizational performance for 106 financial listed companies in Amman for period of 2008-2009 and concluded that independent audit committees have significant effect on company performance.

Lee (2015), observed relationship of institutional shareholders' voting and firm performance in Korea for period of 2009-2011 and reported that institutional shareholders' voting significantly affect performance of Korean firms in long run. Kweh et al. (2015), investigated association of family control and board independence with operating efficiency of Taiwanese firms for period of 2005 to 2012 and found that board independence significantly and positively influenced operating efficiency, whereas, family control has negative effect for Taiwanese firms.

Ducassy and Guyot (2017), found that majority shareholders positively affect value of French firms for sample of 2118 observations during 2000-2009. Buallay, Hamdan, and Zureigat (2017), stated that the ownership and board size significantly and positively influence performance of 171 listed firms in Saudi Arabia for period of 2012 to 2014. Ararat, Black, and Yurtoglu (2017), depicted that governance practices have positive association with profitability and market value for a sample of Turkish firms during 2006 to 2012.

Pillai and Al-Malkawi (2018), disclosed that governance mechanisms including governmental stockholdings, type of audit, size of board and CSR positively impact performance of GCC economies for sample of 349 businesses from 2005 to 2012. Mohan and Chandramohan (2018), demonstrated that board size, CEO duality, leverage and asset turnover significantly and positively affect performance of Indian businesses during 2007 to 2016. Ciftci et al. (2019), argued that higher ownership concentration, larger board's size and overseas ownership have significant and positive relation with business performance for 234 Turkish organizations during period of 2010 to 2013.

We can also see from the literature review that few studies depicted a positive association of governance practices with firm performance, whereas, some other studies depicted a negative and insignificant correlation of corporate governance practices with firm performance.

Therefore, major purpose of this research is to bridge this research gap by investigating relationship of corporate governance practices with firm performance for Asian multinational companies for the period of 2006 to 2015 as regulatory authorities are trying to encourage better governance practices in organizations. This study anticipates a positive correlation of changes in corporate governance practices with firm performance measured through sales growth for Asian multinationals. Consequently, the hypothesis of this research is as follows:

*H1: Better Corporate Governance Practices Results in Increasing the Sales Growth.*

## **RESEARCH FRAMEWORK**

This section presents the framework for this research. It also provides empirical models of this study. The methodology to determine association of corporate governance practices with firm performance for large multinational firms in Asian countries has also discussed. The variables for corporate governance practices which past studies and regulators in Asian countries specified as significant principles are considered which and these variables are employed as the influencing factors in the relationship of governance practices and organizational performance.

### **Data and Selection of Sample**

This research uses quantitative research technique as the purpose is to find association of certain factors of governance practices with business performance for multinational firms in Asian economies. The hypothesis is developed based on results of prior studies in corporate governance area.

The sample of this research is selected from 762 multinational firms in 24 Asian countries listed in World's Largest Public Companies by "Forbes Global 2000". The data covers the period of Year 2008 to Year 2017 and it excludes financial companies (as profits and capital structure of these companies are different in comparison to other firms), and the firms for which complete dataset is not available. There are 762 Asian multinational firms listed in "Forbes Global 2000", out of which 486 firms are non-financial and 276 firms are financial companies. As this study is concerned with non-financial firms only, so the dataset for this study is selected from sample of 486 firms. The required data is collected from annual reports of companies, stock exchanges of concerned countries and organization's web sites.

This research covers ten years period from 2008 to 2017. Therefore,

multinational companies for which completed dataset is not available; are excluded from sample. Accordingly, only those firms are included in final sample for which the complete dataset is available covering all the years and for all the variables. The multinational companies which are included in this research cover almost all sectors of the countries: consumer staples, health care, energy, consumer discretionary, industrials, materials, information technology, telecom services, utilities etc. The final sample excludes 123 non-financial multinational firms due to unavailability of complete data. The remaining 363 non-financial multinational companies (75 % of the sample) are included in the pool dataset of this research as the representatives of larger multinational companies in Asian countries.

The information regarding the total number of multinational firms for Asian countries including both financial and non-financial firms reported in World's Largest Public Companies by "Forbes Global 2000" has been provided in Appendix I which also provide information regarding number of multinational firms included in final sample.

### **Variables**

Dependent and independent variables utilized in this research are explained in following portion. The dependent variable of firm performance measured through Sales Growth (SALESGROW) has been measured as log of sales growth rate (Bradley & Chen, 2014).

The independent variables used in this research are factors described as components of governance practices by past studies (table 3). These factors influence performance of the firm positively or negatively. Just like the measures of governance practices incorporated in previous research (Pham et al. 2016; Bozec & Bozec, 2011; Blom & Schauten, 2008; Ashbaugh et al. 2004, Bradley & Chen, 2011), this study will also analyze the variables of internal governance practices which were observed to have significant impact on firm performance as depicted by previous research. The approaches by which these factors are estimated in this research are described as follows:

Board Independence (BI) is percentage of outsider directors to total directors on the board (independent directors). An outsider director is a board member who is not included in team of executive managers and they are not employees of the firm and they do not have any other affiliation with the organization. The outsider board directors are distinguished from

insider directors who are currently serving or have previously served as the firm's executive managers.

The variable of ownership concentration (OWN) as considered in this research is percentage of stocks owned by top five stockholders to total issued stock in a firm.

An independent audit committee is also an important variable for better governance practices. The variable of Audit Committee Independent (AI) calculated as ratio of independent directors to total directors in committee.

This research also employs an index for determining quality of governance practices. In this study, following the work of Klapper and Love (2004); Ali Shah and Butt (2009), the variable for Quality of Corporate Governance (QCG) will be calculated through following equation (Appendix II):

$$QCG = f(BI, AI, OWN, DUAL) \quad (3.1)$$

Where BI = board independence, AI = audit committee independence, OWN = Ownership Concentration and DUAL = CEO Duality.

The above equation shows the theoretical framework for measurement of governance. These factors will be used independently as a proxy for governance practices and also collectively for calculating governance scores for each organization.

The board size (BSIZE) is also a significant variable for governance activities in a company and is represented as total board directors and calculated as total board directors. Separation of board chairperson and CEO is also critical component of governance practices in firm and it has major influence on business performance and capital cost. This research represents CEO and board chairperson separation as CEO Duality (DUAL), and it takes value of one if chairperson and CEO are same and value of zero if CEO and chairperson are different persons.

The control variables which are having predictive power regarding an organization's profitability as shown by the empirical literature are also included in the regression models for controlling their predictive influences. These variables include Firm Leverage (LEV), Firm Size (SIZE), ROA and Leverage (LEV).

## RESEARCH METHODOLOGY

For analyzing the stated hypotheses, this research will estimate panel data regression equation. This regression equation has been estimated with



Pooled OLS, Fixed Effects and Random Effects Models; then the Hausman Test has been used to identify whether Fixed Effects or Random Effects is applicable for specific regression equation. In case test statistic is rejected, it means that fixed effects technique fits the data better as compared to random effects technique and therefore, fixed effects model is preferred. Secondly, the regression diagnostics are estimated for checking problems of Auto Correlation / Serial Correlation and Heteroskedsticity. Thirdly, in case the problems of serial correlation or heteroskedasticity are detected from the regression diagnostics then it implies that Fixed Effect or Random Effects Models provide spurious regression results.

Therefore, to overcome this problem as suggested by Beck and Katz (1995), the Panels Corrected Standard Errors (PCSE) Model is employed to estimate the regression equations. Fourthly, the Two Stage Least Squares (2SLS) Model is employed to check endogeneity problem of the independent variables. The variable of BI has been considered as endogenous variable based on literature (Firth & Rui, 2012), whereas, the variables of board size (BSIZE) and CEO duality (DUAL) have been considered as instrumental variables. The independent variables in this case are different variables related to governance practices and control variables discussed in previous sections.

The base regression model for testing relationship of corporate governance practices with Sales Growth is stated below.

$$\text{SALESGROW}_{i,t} = \beta_0 + \beta_1 \text{BI} + \beta_2 \text{OWN} + \beta_3 \text{AI} + \beta_4 \text{QCG} + \beta_5 \text{BSIZE} + \beta_6 \text{DUAL} + \beta_7 \text{LEV} + \beta_8 \text{SIZE} + \beta_9 \text{ROA} + \beta_{10} \text{VOL} + U_t$$

## **RESULTS**

The summary of results, related to descriptive statistics for pooled data of world's largest multinational companies of Asian countries, comprising different descriptive measures is presented in Table 1.

As the literature describes that most of the time the panel data suffers with the problems of autocorrelation/serial correlation and heteroskedasticity and in this case, the results of fixed effect or random effects regression models may provide spurious regression results. Therefore, the regression diagnostics tests have been used to check problems of heteroskedasticity and serial correlation in panel dataset used in this study for analysis.

Table 1. Descriptive Statistics

	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis
SALES GROW	1.17	1.15	5.93	-3.46	0.78	0.37	6.73
BI	0.35	0.33	0.90	0.00	0.18	0.50	3.58
OWN	0.59	0.63	0.99	0.02	0.29	-0.17	1.63
AI	0.71	0.67	1.00	0.00	0.27	-0.41	3.10
QCG	0.45	0.43	0.97	0.04	0.65	17.82	33.71
BSIZE	11.12	11.00	34.00	3.00	3.82	1.57	8.17
DUAL	0.22	0.00	1.00	0.00	0.41	1.38	2.89
LEV	0.53	0.54	0.95	0.00	0.24	-0.12	2.31
SIZE	12.83	13.18	23.98	3.26	2.58	-0.14	3.06
VOLA	0.85	0.83	7.60	-4.56	0.81	-8.57	80.61
ROA	7.66	4.71	89.23	-61.95	12.95	8.21	75.52

The Wooldridge test of autocorrelation in panel data has been used for checking the presence of auto correlation / serial correlation in data used in this study. The results of Wooldridge test describes that probability value of F statistics is 0.0000, so we would reject null hypothesis of absence of first order autocorrelation and accept the alternative hypothesis of presence of first order autocorrelation in dataset. So, we concluded that the dataset used in this study incorporates the problem of autocorrelation / serial correlation.

In order to verify presence of heteroskedasticity problem, the Modified Wald Test for groupwise heteroskedasticity in fixed effects model has been utilized and results demonstrate that probability value of Chi2 is 0.0000, so we would reject null hypothesis that panel data does not have problem of heteroskedasticity against the alternative hypothesis that the panel data does have the problem of heteroskedasticity. So, we can conclude that the dataset used in this study suffers with the problem of heteroskedasticity. Therefore, the fixed effects or random effects models may not be suitable in this scenario as they may provide spurious regression results.

The empirical literature depicts that Panel dataset may include complex error structures. The existence of nonspherical errors, if not appropriately tackled, can cause inefficiency in estimation of coefficient and biasedness in SEs' estimation. The existence of serial correlation has been considered a potential problem in panel dataset.

The existence of cross-sectional dependence has now restored attention (Driscoll & Kraay, 1998; De Hoyos & Sarafidis, 2006). There are chances that both may exist in several studies (Jönsson 2005). It presents a problematic situation as common techniques of panel analysis are incapable of handling

both cross sectional dependence and serial correlation simultaneously.

Parks' Feasible Generalized Least Squares (FGLS) technique can handle both problems simultaneously (Parks, 1967). But this model can be employed only when time periods (T) is equal or greater than cross sections (N). Another problem of this model is that it severely underestimates SEs if the sample is finite. Beck and Katz (1995), reported that 'Panel Corrected Standard Error' (PCSE) model provides considerably better results as compared to FGLS model in several situations. So, based on the literature, the PCSE model has been employed to establish correlation of Sales Growth with governance variables along with control variables and the results have been reported in table 2 which describes that value of R Square is 0.4958 which means that governance variables along with control variables have explained about 50% of the variation occurring in sales growth for Asian multinational companies. The probability value of Chi2 is 0.0000 which states the goodness of fit of the PCSE model and also indicates that the mathematical form of the model is correct.

Table 2. Panels Corrected Standard Errors (PCSE) Regression Model

<b>Panel-corrected</b>						
<b>SALESGROW</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt; z </b>	<b>[95% Conf. Interval]</b>	
BI	.002	.104	0.02	0.081	-.202	.207
OWN	.149	.046	3.19	0.001	.057	.241
AI	.031	.063	0.50	0.015	-.092	.155
QCG	-.001	.018	-0.10	0.917	-.037	.033
BSIZE	-.001	.004	-0.45	0.655	-.010	.006
Dual	.098	.035	2.75	0.006	.028	.169
LEV	.074	.066	1.13	0.260	-.055	.204
SIZE	-.015	.013	-1.15	0.250	-.042	.011
ROA	.005	.001	3.36	0.001	.002	.008
VOLA	.016	.029	0.56	0.577	-.041	.075
_cons	1.179	.140	8.38	0.000	.903	1.455
rho	.217					

The results have also indicated that variables of BI, AI, OWN and DUAL have positive and significant relation with sales growth in Asian multinational companies. The control variable of ROA also has positive and significant relationship with sales growth. These results are consistent with the findings of Shleifer and Vishny (1986); Burkart (1995); Chahine (2004); and Peng et al. (2007). The results also depicts that the variables of QCG, BSIZE, LEV, SIZE and VOL have insignificant influence on sales growth for Asian multinational companies.

For checking the problem of endogeneity of board independence (BI), the 2SLS model has been applied. The variable of BI has been considered as endogenous variable based on literature, whereas, the variables of board size (BSIZE) and CEO duality (DUAL) have been considered as instrumental variables. The results of 2SLS regression model have been presented in table 3 which depicts that value of R Square is 0.5191 which means that the independent variables used in this study have explained around 52% of the variation occurring in sales growth. The probability value of chi2 is 0.0000 which shows the goodness of fit of the model and describes that the mathematical form of the model is accurate.

The results demonstrate that the variables of OWN, BI and AI have positive and significant impact on sales growth for Asian multinational companies. The control variables of ROA and VOL also have positive and significant association with sales growth. These results are similar to the findings of Shleifer and Vishny (1986); Burkart (1995); and Chahine (2004). The findings also demonstrate that the variable of SIZE have negative and significant association with sales growth for Asian countries. Moreover, the variables of QCG and LEV have insignificant impact on sales growth.

In order to test the endogeneity for variable of BI, the Durbin and Wu-Hausman tests have been applied and based on the p-value of Durbin and Wu-Hausman test statistics of 0.0003 and 0.0005 respectively, we reject null hypothesis that variables are exogenous and accept alternate hypothesis that variables are not exogenous. We conclude that the problem of endogeneity does exist in regression model and BI is the endogenous variable in this model, therefore, 2SLS model is best for estimation.

Table 3. The Two Stage Least Squares (2SLS) Regression Model

Panel-corrected						
SALESGROW	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
BI	.240	.253	-0.95	0.042	-.737	.256
OWN	.186	.053	3.51	0.000	.082	.290
AI	.06	.066	0.91	0.033	-.069	.189
QCG	.009	.021	0.47	0.639	-.031	.051
LEV	.079	.053	1.49	0.138	-.025	.185
SIZE	-.014	.005	-2.69	0.007	-.025	-.004
ROA	.006	.001	5.18	0.000	.003	.008
VOLA	.035	.021	1.68	0.093	-.006	.077
_cons	1.162	.091	12.68	0.000	.982	1.342

Instrumented: BI

Instruments: OWN AI QCG LEV SIZE ROA VOLA Dual BSIZE

After verifying the endogeneity of the variables, the test for First Stage Regression Summary Statistics has been employed to determine whether the instrumental variables are weak or not and results depict that Minimum eigenvalue statistic is 187.25; this value needs to be compared with critical values at 10%, 15%, 20% and 25%. The minimum eigenvalue is greater than all the critical values, so we would reject null hypothesis that instruments are weak and accept alternative hypothesis that the instrumental variables are not weak.

After determining the endogeneity of BI and determining that instrumental variables of BSIZE and DUAL are not weaker instruments, the test of Overidentifying restrictions has been used and results depict that the p-value statistics for the both Sargan Test and Basmann Test are 0.1358 and 0.1678 respectively, so we cannot reject null hypothesis that instruments set are valid and model is correctly specified. So, we conclude that the instrumental variable included in this model namely board size and CEO duality are both valid instruments and 2SLS model which has been employed for the analysis in this study is correctly specified.

### **CONCLUSION**

The endogeneity of regression model has been investigated by applying the 2SLS and based on past literature, the variable of BI has been treated as endogenous variable, whereas, variables of BSIZE and DUAL have been considered as instrumental variables and results depicts that the variables of board independence, audit committee independence, ownership concentration, ROA and volatility of stock prices have positive and significant association with sales growth, whereas, the variable of firm size has negative and significant correlation with sales growth. The post estimation tests of 2SLS model also indicate that problem of endogeneity does exist in the model and BI is endogenous variable; the decision to include BSIZE and DUAL as the instrumental variables is right decision as these instruments are stronger instruments and the instrumental variables included in this model namely board size and CEO duality are both valid instruments and the 2SLS model which has been employed for the analysis is correctly specified.

The corporate governance practices are very important for all firms as it strengthens trust of investors, creditors, and all stakeholders regarding organizational activities. These practices are even more important for larger and multinational firms as considerable number of shareholders and

stakeholders are involved in these organizations. The findings of this study suggested that better corporate governance practices result in higher performance for Asian multinational firms. These results justify most of the past research and corporate governance theories in general and agency cost theory in particular regarding role of corporate governance activities in lowering agency cost and improving firm performance. These findings are significant as sample considered in this study comprises of top multinational firms in Asian countries; therefore, it is important for policy makers of these firms to further improve and develop their corporate governance activities as they would gain the benefits of increased profitability. It would result in further development and growth of these firms as investors and creditors are more interested to invest in those firms where corporate governance structures are better. Moreover, the size and share capital of these firms is very large; therefore, the results of this study are also very important for investors and creditors around the world as they can forecast the performance of these firms based on their corporate governance systems. Furthermore, better governance practices consider interests of all stakeholders including efforts for improving lives and welfare of labor/workers/employees which ultimately leads towards social welfare of the society as a whole.

### **RECOMMENDATIONS FOR FUTURE RESEARCH**

The future research could concentrate on extending this study in various directions. Some of these directions are identified as follow:

1. Firstly, the main focus of this research was determining the relationship of corporate governance practices with cost of capital for larger multinational companies in Asian countries. Although larger multinational firms play significant roles in each economy, but the role of other firms cannot be ignored. Therefore, the future researchers could clarify these effects in small, medium, and public firms.
2. Secondly, every economy has its own attributes and characteristics; therefore, it is harder to offer standardized guidelines for all firms and countries. The guidelines and recommendations should rely on the specific attributes and characteristics of each country and economy. Therefore, separate analysis of each country should be conducted in future research.

## REFERENCES

- Ali Shah, S., & Butt, S. (2009). The impact of corporate governance on the cost of equity: empirical evidence from Pakistani listed companies. *The Lahore Journal of Economics*, 14(1), 139-171.
- Anum Mohd Ghazali, N. (2010). Ownership structure, corporate governance and corporate performance in Malaysia. *International Journal of Commerce and Management*, 20(2), 109-119.
- Ararat, M., Black, B. S., & Yurtoglu, B. B. (2017). The effect of corporate governance on firm value and profitability: Time-series evidence from Turkey. *Emerging Markets Review*, 30, 113-132.
- Ashbaugh, H., Collins, D. W., & LaFond, R. (2004). Corporate governance and the cost of equity capital. *Emory, University of Iowa*. Retrieved on January, 26, 2006.
- Beck, N., & Katz, J. N. (1995). What to do (and not to do) with time-series cross-section data. *American political science review*, 89(3), 634-647.
- Blom, J., & Schauten, M. B. (2008). Corporate governance and the cost of debt *New developments in financial modelling* (Vol. 116, pp. 116-145): Cambridge Scholars Publishing in association with GSE Research.
- Bozec, Y., & Bozec, R. (2011). Corporate governance quality and the cost of capital. *International Journal of Corporate Governance*, 2(3-4), 217-236.
- Bradley, M., & Chen, D. (2014). Does board independence reduce the cost of debt? *Financial Management*, 44(1), 15-47.
- Buallay, A., Hamdan, A., & Zureigat, Q. (2017). Corporate governance and firm performance: evidence from Saudi Arabia. *Australasian Accounting, Business and Finance Journal*, 11(1), 78-98.
- Burkart, M. (1995). Initial shareholdings and overbidding in takeover contests. *The Journal of Finance*, 50(5), 1491-1515.
- Chahine, S. (2004). Corporate governance and firm value for small and medium sized IPOs. *Financial Markets and Portfolio Management*, 18(2), 143-159.

- Ciftci, I., Tatoglu, E., Wood, G., Demirbag, M., & Zaim, S. (2019). Corporate governance and firm performance in emerging markets: Evidence from Turkey. *International Business Review*, 28(1), 90-103.
- Coskun, M., & Sayilir, Ö. (2012). Relationship between corporate governance and financial performance of Turkish companies. *International Journal of Business and Social Science*, 3(14), 59-64.
- De Hoyos, R. E., & Sarafidis, V. (2006). Testing for cross-sectional dependence in panel-data models. *Stata Journal*, 6(4), 482.
- Dogan, M., Elitas, B. L., Agca, V., & Ögel, S. (2013). The impact of CEO duality on firm performance: evidence from turkey. *International Journal of Business and Social Science*, 4(2), 149-155.
- Driscoll, J. C., & Kraay, A. C. (1998). Consistent covariance matrix estimation with spatially dependent panel data. *Review of economics and statistics*, 80(4), 549-560.
- Ducassy, I., & Guyot, A. (2017). Complex ownership structures, corporate governance and firm performance: The French context. *Research in International Business and Finance*, 39, 291-306.
- Ergin, E. (2012). Corporate Governance ratings and market-based financial performance: evidence from Turkey. *International Journal of Economics and Finance*, 4(9), 61-68.
- Firth, M.A. & Rui, O.M. (2012). Does One Size Fit All: A Study of Simultaneous Relations Among Ownership, Corporate Governance Mechanisms, and the Financial Performance of Firms in China. *Corporate Governance: Recent Developments and New Trends*, XXIV, 29-58.
- Gill, A., & Obradovich, J. (2013). The impact of corporate governance and financial leverage on the value of American firms. *International Research Journal of Finance & Economics*, 91, 45-56.
- Hamdan, A. M., Sarea, A. M., & Reyad, S. M. R. (2013). The impact of audit committee characteristics on the performance: Evidence from Jordan. *International Management Review*, 9(1), 32-42.



- Hassan Al-Tamimi, H. A. (2012). The effects of corporate governance on performance and financial distress: The experience of UAE national banks. *Journal of Financial Regulation and Compliance*, 20(2), 169-181.
- Ivashkovskaya, I., & Stepanova, A. (2011). Does strategic corporate performance depend on corporate financial architecture? Empirical study of European, Russian and other emerging market's firms. *Journal of Management & Governance*, 15(4), 603-616.
- Jönsson, K. (2005). Cross-sectional Dependency and Size Distortion in a Small-sample Homogeneous Panel Data Unit Root Test. *Oxford Bulletin of Economics and Statistics*, 67(3), 369-392.
- Klapper, F. L., & Love, I. (2002). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance*, 10(5), 703-728.
- Kweh, Q. L., Kuo, K. C., Wang, W. K., & Liu, H. M. (2015). Board independence, family control, and performance in Taiwanese listed semiconductor companies. *Hitotsubashi Journal of Economics*, 56(1), 93-115.
- Lee, S. (2015). Corporate governance and firm performance: evidence from institutional investors and proxy voting in Korea. *Hitotsubashi Journal of Economics*, 56(1), 35-53.
- Martani, D., & Saputra, Y. E. (2009). The impact of corporate governance to the economic value added listed company in BEI 2003-2004. *China-USA Business Review*, 8(3), 26-40.
- Mohan, A., & Chandramohan, S. (2018). Impact of Corporate Governance on Firm Performance: Empirical Evidence from India. *International Journal of Research in Humanities, Arts and Literature*, 6(2), 209-218.
- Nuryanah, S., & Islam, S. (2011). Corporate Governance and Performance: Evidence from an Emerging Market. *Malaysian Accounting Review*, 10(1), 17-42.

- Parks, R. W. (1967). Efficient estimation of a system of regression equations when disturbances are both serially and contemporaneously correlated. *Journal of the American Statistical Association*, 62(318), 500-509.
- Pham, P. K., Suchard, J. O., & Zein, J. (2016). Corporate Governance, Cost of Capital and Performance: Evidence from Australian Firms. *Journal of Applied Corporate Finance*, 24(3), 84-93.
- Pillai, R., & Al-Malkawi, H.-A. N. (2018). On the relationship between corporate governance and firm performance: Evidence from GCC countries. *Research in International Business and Finance*, 44, 394-410.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of political economy*, 94(3, Part 1), 461-488.
- Stanwick, P. A., & Stanwick, S. D. (2010). The relationship between corporate governance and financial performance: An empirical study of Canadian firms. *The Business Review, Cambridge*, 16(2), 35-41.
- Tornyeva, K., & Wereko, T. (2012). Corporate governance and firm performance: Evidence from the insurance sector of Ghana. *European Journal of Business and Management*, 4(13), 95-112.
- Vintila, G., & Gherghina, S. C. (2012). An empirical investigation of the relationship between corporate governance mechanisms, CEO characteristics and listed companies' performance. *International Business Research*, 5(10), 175-191.

# Appendix I. Multinational Firms of Asian Countries Reported in FORBES Global 2000

<b>Region</b>	<b>Country</b>	<b>Total Firms</b>	<b>Financial Firms</b>	<b>Non-Financial Firms</b>	<b>Firms Included in Final Sample</b>
<b>East Asia</b>	China	149	50	99	51
	Japan	226	70	156	126
	South Korea	61	15	46	37
	Taiwan	47	17	30	19
	Hong Kong	58	25	33	25
<b>South Asia</b>	India	54	22	32	25
	Pakistan	2	0	2	2
<b>Central Asia</b>	Kazakhstan	3	2	1	1
<b>ASEAN</b>	Thailand	17	7	10	10
	Vietnam	2	1	1	1
	Malaysia	17	6	11	7
	Singapore	17	6	11	10
	Indonesia	9	6	3	3
	Philippines	10	3	7	7
<b>Eurasia</b>	Russia	28	3	25	20
<b>Middle East</b>	Saudi Arabia	20	10	10	10
	Israel	10	8	2	2
	Qatar	8	6	2	2
	UAE	14	10	4	4
	Kuwait	4	3	1	1
	Jorden	1	1	0	0
	Bahrain	2	2	0	0
	Oman	1	1	0	0
	Lebanon	2	2	0	0
<b>Total Sample</b>		<b>762</b>	<b>276</b>	<b>486</b>	<b>363</b>

## Appendix II: Scoring Criteria and their Weights for QCG

### 1. Number of INEDs in Board of Directors: (Weight 25%)

Range	Score
0%—20%	1
21%—40%	2
41%—60%	3
61%—80%	4
81% and above	5

### 2. No. of INEDs in Audit Committee: (Weight 25%)

Range	Score
0%—20%	1
21%—40%	2
41%—60%	3
61%—80%	4
81% and above	5

### 3. Ownership Concentration: (Weight 25%)

Range	Score
0%—20%	5
21%—40%	4
41%—60%	3
61%—80%	2
81% and above	1

### 4. CEO Duality: (Weight 25%)

Value of 0	2
Value of 1	1