

Panel Data Analysis on the Impact of Corporate Governance on Firm Performance: Evidence from Bursa Malaysia Companies with Good CG Disclosures

Tun Yin Li^{*}, Low Suet Ching,
Shubatra Shanmugaretnam and Beverly Teh Boon Gaik
*Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Selangor,
Malaysia*

ABSTRACT

Using Panel Data Analysis, this research investigated the performance of the firm from the top 100 companies with good CG disclosures (2019) on Bursa Malaysia against corporate governance mechanisms. The study period was 2013 – 2019. Firm performance was measured using Earnings per share (EPS), Tobin Q (TQ) and Return on Equity (ROE) while corporate governance mechanisms were CEO Duality (CDUAL), Board Size (BSIZE), Independent Directors (BIND), Board Meetings (BMEET), Women Directors (WOMD), Foreign Qualifications' Directors (FORD). Little evidence was recorded for the period under the study. CDUAL was only significant with ROE, BSIZE was significant with EPS & ROE, BIND was significant with TQ & ROE, BMEET significant with TQ & ROE. WOMD significant with TQ & ROE, FORD was only significant with EPS. Results indicated the companies with good CG disclosures do not correspond with firm performance. Much more CG compliance needs to be done to improve firm performance.

Keywords: Corporate Governance, Company Performance, Top 100 Good CG Disclosures Companies, Bursa Malaysia

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* Corresponding Author: Tun Yin Li; Faculty of Accountancy and Management, Universiti Tunku Abdul Rahman, Selangor, Malaysia; Email: yinlitun@gmail.com; Tel: +60122718899

INTRODUCTION

While corporate governance practices is not newly introduced, the reformation was only taken seriously after the Asian Financial Crisis in 1997-1998 as the crash was allegedly caused by poor corporate governance (Abdul Wahab, Haron, Char, and Yahya, 2011). The Malaysian Code on Corporate Governance (MCCG) was launched in March 2020 by the working group on the best practices in corporate governance (JPK1) (Mohamad, Pantamee, Ooi and Kwong, 2020). At the same time, the minority shareholders watchdog group (MSWG) was established to safeguard the minority shareholders' interest. Using the MSWG's top 100 public-listed companies with good CG disclosures, this study aimed to examine the impact of corporate governance mechanisms on firm performance.

Previous studies demonstrated that these initiatives had made a consistent impact on Malaysia's corporate governance landscape since the establishment of MCCG. The correlation between good governance and firm performance has been a subject of scrutiny. Common concern on good corporate governance should lead to good firm performance after reformation of corporate governance.

Extensive research has been conducted to examine the impact of corporate governance on firm performance. However, during the period of 2000 to 2017, only two studies had related this impact to Malaysia's Top 100 public-listed companies with good CG disclosures and the results found to be mixed (Mohamed Zabri, Ahmad, and Khaw, 2016; Shamsudin, Wan Abdullah and Osman, 2018).

Upon reviewing past studies, variables such as CEO duality, board size, board independence and number of board meetings were commonly related to return on assets (ROA), return on equity (ROE) and Tobin's Q (Mohamed Zabri et al, 2016; Ahmad, Raja Kamaruzaman, Hamdan, and Annuar, 2019). However limited studies were conducted on Earning per share (EPS) measurement. There is a scarcity of studies examining the presence of directors with foreign qualifications and women directors. Hence, this research extended, investigated and measure the effects of corporate governance towards EPS, ROE and Tobin's Q. Therefore, the existing scholarly literature has yet to provide conclusive evidence regarding the

correlation between CG and corporation performance Thus, to establish the relationship between CG and firm performance within a national context, further research is necessary to bridge the gap.

The result of this research will enhance the existing literature by investigating the underexplored corporate governance practices and connection between MCCG practices and firm performance. The findings in this study can provide valuable assistance to diverse stakeholders and policy makers in Malaysia. This will be able to establish strong corporate governance practices and implement modifications that better accord with the context of Malaysia corporate governance.

LITERATURE REVIEW

Corporate Governance

Corporate Governance refers to the framework and arrangement employed to guide and oversee the operations and management of a company that aims to foster business success and corporate responsibility. Corporate Governance's main objective is to create long-term, sustainable shareholder value while considering the best interest of stakeholders involved (MCCG 2021).

In October 2007, the Securities Commission of Malaysia revised and published the MCCG that emphasized on optimizing the function of board, nomination committee, audit committee and internal audit. This study examined the corporate governance best practices as independent variables against firm performance as dependent variables.

Independent Variables

CEO duality (CDUAL)

CEO duality is the practice in which the Chief Executive Officer (CEO) has both the presidency of the company as the chairman of its Board of Directors (Abdul Waha et al, 2011). It describes the non-separation of Chairman and CEO responsibilities. Abdul Wahab et al (2011) explained the conflict of the interest if chairman and CEO are the same individuals and this was proven in Allhaji, Wan Yusoff and Alkali (2012) in that it will

weaken the board's responsibilities on monitoring and control. Separate leadership can also reduce agency conflicts and improve organization performance. This will allow the board to have more power in controlling and monitoring CEO's performance.

There was a negative correlation between CDUAL and ROA (Abdulsamad et al ,2018) and insignificant relationship between CDUAL and EPS. Mohd Ghazali (2020) showed that CDUAL led to better firm performance. However, there was a negative correlation between CDUAL and TOBQ (Khan et al, 2021). Based on the past studies, there was a significant relationship between CDUAL and firm performance.

Board size (BSIZE)

Board Size is defined as total number of directors that participate on the board of the company. However there was no mention on the optimal size for best practice. According to Abdul Wahab et al (2011) an optimal equilibrium is attained when the board is of a size that enables it to operate efficiently and furnish expeditious resolutions. A board should be composed of a range of different perspectives and backgrounds.

There was a positive corelationship between BSIZE and ROA (Sjukeri, Ong and Shaari, 2012; Mohamed Zabri et al, 2016). However there was an insignificant correlationship between BSIZE and ROE. There were different outcomes in Marn and Romuald (2012) and Abdulsamed et al (2018) between BSIZE and EPS.

Board independence (BIND)

Board Independence is defined as the ratio of independent directors to total number of director serving on the board. According to Bursa Malaysia Listing Requirements, it is mandated that a minimum one-third of the board members must be independent directors. In contrast to MCCG 2017, it mandates that independent directors must occupy at least 50% of the board. The purpose of independent directors is to reduce conflict of between shareholders and management in setting remuneration, nomination and decision making.

Based on past studies, there are inconsistent outcomes when examining the relationship between board independence and firm performance. Byrd et al (2010) studies showed a positive effect between independent directors

and firm performances. However, Abdullah and Ku Ismail (2013) did not find any significant relationship between the two.

Number of board meeting (BMEET)

Based on MCCG, the Board of Directors is responsible for ensuring that an adequate number of meetings are conducted annually to deliberate issues related to company's strategies and management. Based on recommendations by MCCG, directors are entrusted with the responsibility of serving as stewards and efficiently guide the organization to generate shareholders's wealth. Past studies examined revealed that number of board meetings and firm performance had a negative correlation (Admed Haji and Mubaraq, 2015; Abdulsamad et al (2018).

Number of women director (WOMD)

Abdullah et al (2012) explained that the increase of female representation in decision- making position was brought to attention by Malaysia Government in 2004. The sluggish implementation rate of women directors in boards, caused the Malaysia Government to approve policy to accelerate the adoption of gender diversity within the board so that there is a minimum of 30% of women directors in the board (Ahmad et al, 2019). Yap, Chap and Zainudin (2017) showed a positive relationship between women directors and firm performance. However there was a negative relationship between women directors and firm performance in Abdullah and Ku Ismail (2013).

Number of director with foreign qualification (FORD)

Limited past studies are available on number of directors with foreign qualifications and it is not stated in MCCG requirements. Directors with foreign qualification always have different perspectives for management deliberations as their experience could compliment locally qualified directors. Darmadi (2013) showed no significant relationship between number of directors with foreign qualification and firm performance.

Dependent Variable

Earning per share (EPS)

EPS is defined as ratio of profit before tax to outstanding common shares. In Ibrahim, Ahmad and Khan (2017) and Abdulsamad et al (2018) measured EPS as an indicator of organizational performance.

Tobin's Q (TOBQ)

Tobin's Q is defined as the ratio of market value of the firm to book value of total assets. Based on Yap et al (2017) and Mohd Ghazali (2020) examined organizational performance by measuring Tobin's Q.

Return on equity (ROE)

ROE illustrates on how much an organization generates profits from shareholders' investment. It is a widely used measurement by most studies (Mohd Ghazali, 2020). It calculates the net income to total equity (Ahmed Haji and Mubaraq, 2015). ROE was selected by Mohamed Zabri et al (2016) in examining the relationship between corporate governance and ROE for Malaysia's Top 100 listed companies with good CG disclosures

Theoretical Perspective

Agency theory



Figure 1: Agency Theory
(Source: Yusoff, W. F. W., & Alhaji, I. A (2012))

The Agency Theory (Jensen and Meekling, 1976) explains the relationship between directors and shareholders of the organization are principal-agent relationships where directors act as an agent for shareholders. To limit the power of directors, public listed companies are required to prepare annual reports to the shareholders as a corporate governance practice.

Stewardship theory

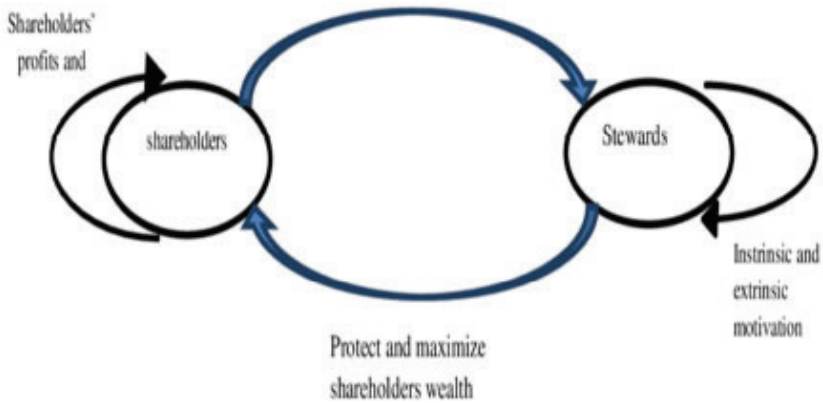


Figure 2: Stewardship Theory
 (Source: Yusoff, W. F. W., & Alhaji, I. A (2012))

The Stewardship Theory explains that the manager is deemed as a trustworthy individual and possess an inherent inclination towards effective stewards of the organisation. Each director is perceived as intrinsically responsible for managing the organisation and not motivated by personal gain but rather sincere desire to propel the organisation towards heightened achievement. The Stewardship Theory explains that a high independent board of directors may negatively impact on the company as directors may lack sufficient knowledge on the organisation which might hinder their ability to make good decisions that align with interest of the organisation. Stewardship theory is predicated on the notion that the interest of the managers (agents) to the owner (principals) are aligned (van Doel & Howell, 2022).

Stakeholder theory

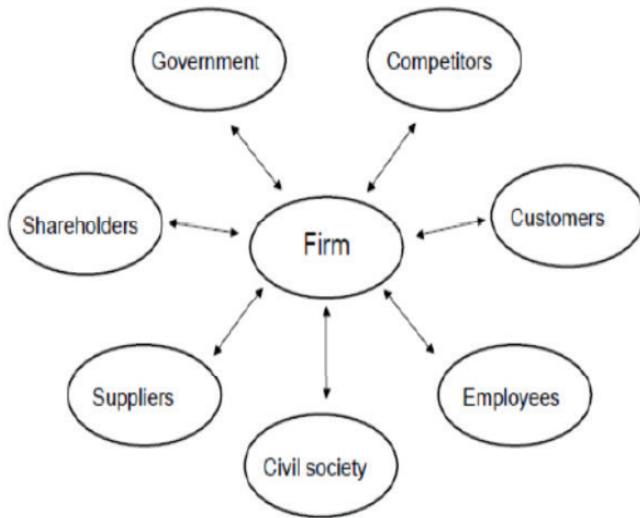


Figure 3: Stakeholder Theory
(Source: Mishra, A., & Mishra, D (2013))

The Stakeholder Theory represents an extension of the Agency Theory. In the Stakeholder Theory, the role of the principal has evolved beyond the traditional scope of shareholders to encompass a wider range of stakeholders who may have an impact on the company’s objectives such as employees and government. Corporate governance practice had suggested to include environmental, social and governance (ESG) in MCCG 2021 guideline. Dependent variables are utilised to gauge firm performance which serve as an indicator for the level of accountability that companies exhibit towards stakeholders.

Resource dependency theory

Pfeffer and Salancik (1978) explained that Resource Dependency Theory is the view that the board of directors hold a significant position in an organization that is pertinent to organisational operations. Ahmad et al (2019) suggested that it is possible to make assumptions regarding the potential impact of female directors on firm’s performance. The Dependency Theory demonstrates that corporate governance practices should be implemented such as board composition and board diversity. The entails encouraging board directors to possess diverse characteristics including

age, race, gender and qualification with the aim to facilitate a board range of perspectives during the decision making process.

Conceptual Framework

Figure 5 illustrate the conceptual framework of this study. The hypotheses are:

H_0 : CDUAL, BSIZE, BIND, BMEET, WOMD and FORD has no significant relationship with EPS, TOBQ and ROE.

H_1 : CDUAL, BSIZE, BIND, BMEET, WOMD and FORD has significant relationship with EPS, TOBQ and ROE.

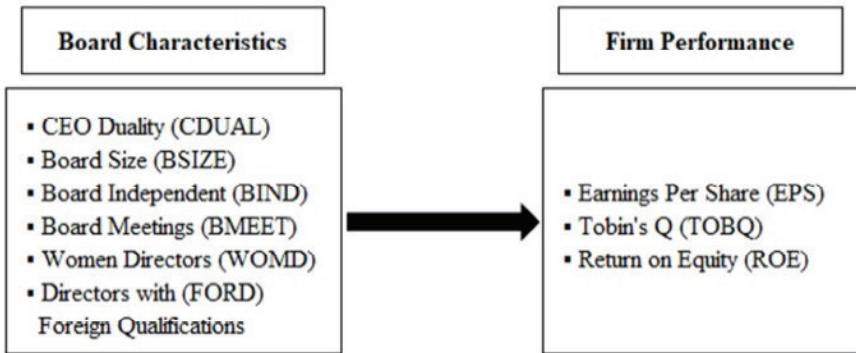


Figure 5 : Conceptual Framework for Impact of Corporate Governance on Firm Performance

METHODOLOGY

Research Design

This research applied a quantitative approach to analyse secondary data obtained from annual reports and verified financial data sourced from the Bloomberg Terminal. This study employed a sample of publicly listed companies on Bursa Malaysia with good CG disclosures from 2013 to 2019.

Sampling Design

The targeted sample was based on Top 100 companies that were listed on MSWG with good corporate governance disclosures. The sample size for this study was 81 companies, resulting in 567 firm-year observations from 2013 to 2019.

Construct Measurement

Table 1: Measurement of Independent Variables

Independent Variable	Definition / Formula	Adopted from
CDUAL	0= No CEO Duality 1= CEO Duality (Board chairman is same as CEO)	Abdul Wahab et al. (2011)
BSIZE	Total number of directors on the board	Abdul Wahab et al. (2011) Ahmed Haji and Mubaraq (2015)
BIND	(No. of Ind. Directors) / (Total No. of Directors)	Ahmed Haji and Mubaraq (2015)
BMEET	Total number of board meetings in a year	Ahmed Haji and Mubaraq (2015) Mohd Ghazali (2020)
WOMD	(No. of Women Directors) / (Total No. of Directors)	Abdullah and Ku Ismail (2013)
FORD	(No. of Dir.with Foreign Qualification) / (Total No. of Directors on Board)	Darmadi (2013b)

Table 2: Measurement of Dependent Variables

Independent Variable	Definition / Formula	Adopted from
EPS	(Profit Before Taxes) / Outstanding Common Shares	Tham and Romuald (2012)
TOBQ	(Market Value of Equity + Book Value of Total Debts) / (Book Value of Total Assets)	Ahmed Haji (2014)
ROE	(Net Income) / (Total Equity)	Mohd Ghazali (2020)

Panel Data Analysis

This study employed Panel Data analysis to analyse cross-sectional time series for variables across a time period via EViews software. A total of 81 companies were selected to analyse variables representing corporate governance. There are two types of approaches involved in this Panel Data analysis, namely Fixed Effect model and Random Effect model. The selection of the approaches is based on the Probability value of Hausman

test. If probability value is more (less) than 0.05, the Random Effects (Fixed Effect) model will be employed.

Model specification are as below:

$$Y_{i,t} = \beta_0 + \beta_1 CDUAL_{i,t} + \beta_2 BSIZE_{i,t} + \beta_3 BIND_{i,t} + \beta_4 BMEET_{i,t} + \beta_5 WOMD_{i,t} + \beta_6 FORD_{i,t} + \varepsilon_{it} \quad (1)$$

Where :

Y = EPS/TOBQ/ROE, β = coefficient of the independent variable; ε = error term; i = individual firm observation in data set; t = observation in time series data set

RESULTS AND DISCUSSION

Descriptive Statistic

The finding of the descriptive analysis indicated a high compliance rate among the sample size where the average board independence satisfied the 50% requirement. Board meetings had an average of 7.91 meetings a year among the companies researched falling a fraction short of the recommended number of 8 meetings a year. Board size (average: 8.31) complied with the minimum number of 8 members. Only 1 out of 81 companies practised CEO duality. From the companies investigated in this research, 82.26% of the directors on board had foreign qualifications bringing a different perspective to the board. Unfortunately, women directors on the board was significantly inadequate as the average proportion of women directors stood at 18% falling short of the recommended 30%.

Table 3 : Descriptive Statistics

	BIND	BMEET	BSIZE	CDUAL	FORD	WOMD
Mean	0.525238	7.915344	8.310406	0.024691	0.822684	0.180022
Median	0.500000	7.000000	8.000000	0.000000	0.857143	0.166667
Maximum	1.000000	27.000000	14.000000	1.000000	1.000000	0.625000
Minimum	0.222222	2.000000	4.000000	0.000000	0.333333	0.000000
Std. Dev	0.118296	4.158081	1.760064	0.155320	0.158176	0.122437
Skewness	0.338590	1.657999	0.208955	6.125791	-0.715595	0.509699
Kurtosis	2.978796	5.952568	2.850795	38.52532	2.716713	3.134880

Earning per Share (EPS)

Hausman test was more than 0.05 (0.5770) which indicated that the Random Effects model was preferable and adopted. Based on Table 5, BIND, WOMD and FORD were positively related with EPS while CDUAL, BSIZE and BMEET were negatively related with EPS. However BSIZE and FORD had a significant relationship with EPS because p-values were 0.0870 and 0.0719 which is less than 0.1. Based on the analysis, H_{1A} , H_{3A} , H_{4A} and H_{5A} were rejected and H_{2A} and H_{6A} were accepted.

Table 4: Hausman test for EPS

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.744626	6	0.5770

Table 5: Random Effect Model for EPS

Dependent Variable: EPS
Method: Panel EGLS (Cross-section random effects)
Date: 06/19/23 Time: 17:20
Sample: 2013 2019
Periods included: 7
Cross-sections included: 81
Total panel (balanced) observations: 567
Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CDUAL	-5.842448	15.87871	-0.367942	0.7131
BSIZE	-2.288042	1.334417	-1.714638	0.0870
BIND	0.776123	18.40382	0.042172	0.9664
BMEET	-0.116785	0.607206	-0.192332	0.8476
WOMD	15.97327	15.58543	1.024885	0.3059
FORD	30.86149	17.11793	1.802875	0.0719
C	27.13638	20.52850	1.321888	0.1867

Effects Specification			
		S.D.	Rho
Cross-section random		50.70077	0.7368
Idiosyncratic random		30.30159	0.2632
Weighted Statistics			
R-squared	0.013527	Mean dependent var	7.871807
Adjusted R-squared	0.002958	S.D. dependent var	30.31247
S.E. of regression	30.26760	Sum squared resid	513031.6
F-statistic	1.279873	Durbin-Watson stat	1.525756
Prob(F-statistic)	0.264544		
Unweighted Statistics			
R-squared	0.016493	Mean dependent var	35.72561
Sum squared resid	1926228.	Durbin-Watson stat	0.406370

Tobin's Q

Hausman test was less than 0.05 (0.0025), hence H_0 is rejected and the Fixed Effects model was used. As shown in Table 7, the CDUAL, BSIZE and WOMD were positively related with TOBQ. However BIND, BMEET and FORD were negatively related with TOBQ. But the result showed that all CDUAL, BSIZE, BIND, BMEET, WOMD and FORD were not significant with TOBQ as the p-values was greater than 0.1. Based on the analysis, H_{1B} , H_{2B} , H_{3B} , H_{4B} , H_{5B} and H_{5B} were rejected because all p-values were greater than 0.1.

Table 6: Hausman test for TOBQ

Correlated Random Effects - Hausman Test
 Equation: Untitled
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.266872	6	0.0025

Table 7: Fixed Effect Model for TOBQ

Dependent Variable: TOBQ
 Method: Panel Least Squares
 Date: 06/19/23 Time: 17:21
 Sample: 2013 2019
 Periods included: 7
 Cross-sections included: 81
 Total panel (balanced) observations: 567

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CDUAL	0.226916	0.481036	0.471724	0.6373
BSIZE	0.038604	0.039962	0.966015	0.3345
BIND	-0.505801	0.545637	-0.926992	0.3544
BMEET	-0.013010	0.018481	-0.703960	0.4818
WOMD	0.294359	0.453346	0.649304	0.5165
FORD	-0.044137	0.529454	-0.083364	0.9336
C	2.230154	0.602149	3.703660	0.0002

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.881989	Mean dependent var	2.204603
Adjusted R-squared	0.860845	S.D. dependent var	2.285253
S.E. of regression	0.852479	Akaike info criterion	2.658970
Sum squared resid	348.8262	Schwarz criterion	3.324951
Log likelihood	-666.8180	Hannan-Quinn criter.	2.918876
F-statistic	41.71398	Durbin-Watson stat	0.874041
Prob(F-statistic)	0.000000		

Return of Equity (ROE)

The Hausman test was less than 0.05 (0.0106), hence H_0 was rejected and the Fixed Effects model was used. As Shown in Table 9, CDUAL and FORD were positively related with ROE while BSIZE, BIND, BMEET and WOMD were negatively related with ROE. BMEET and FORD were significant towards ROE because the p-values were less than 0.1. However, CDUAL, BSIZE, BIND and WOMD were not significant towards ROE because their p-values were greater than 0.1. Based on the analysis, H_{4C} and H_{6C} were accepted and H_{1C} , H_{2C} , H_{3C} and H_{5C} rejected because their p-values were greater than 0.1.

Table 8: Hausman test for ROE

Correlated Random Effects - Hausman Test
 Equation: Untitled
 Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	16.671693	6	0.0106

Table 9 : Fixed effect model for ROE

Dependent Variable: ROE
 Method: Panel Least Squares
 Date: 06/19/23 Time: 17:25
 Sample: 2013 2019
 Periods included: 7
 Cross-sections included: 81
 Total panel (balanced) observations: 567

Variable	Coefficient	Std. Error	t-Statistic	Prob.
CDUAL	0.474983	7.819721	0.060742	0.9516
BSIZE	-0.371636	0.649621	-0.572082	0.5675
BIND	-10.86461	8.869877	-1.224889	0.2212
BMEET	-0.530721	0.300435	-1.766506	0.0779
WOMD	-0.934889	7.369592	-0.126858	0.8991
FORD	14.84959	8.606802	1.725332	0.0851
C	23.13971	9.788530	2.363962	0.0185

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.898894	Mean dependent var	22.20386
Adjusted R-squared	0.880779	S.D. dependent var	40.13483
S.E. of regression	13.85791	Akaike info criterion	8.235894
Sum squared resid	92179.98	Schwarz criterion	8.901875
Log likelihood	-2247.876	Hannan-Quinn criter.	8.495800
F-statistic	49.62197	Durbin-Watson stat	1.512146
Prob(F-statistic)	0.000000		

Discussion

Based on the analysis there are relationships between corporate governance and firm performance. FORD did play an important role towards firm performance, which could be due to the firms having a diversified board along with different experiences, backgrounds and skills that lead to better decision making. CEO duality had a negative impact towards firm performance which could be due to lack of separation of duty leading to mismanagement and wrong decision making for the organisation. Board size had negative impact on EPS and ROE which explained that a bigger board size could reduce firm performance. Board Independence had a negative relationship towards TOBQ and ROE but positive relationship towards EPS. This result aligned with Darmadi (2013) and Shamsudin et al (2018). Board meeting also showed a negative correlation toward EPS, TOBQ and ROE and this was supported by Ahmed Haji and Mubaraq (2015). Women director had negative impact towards ROE but showed a positive relationship toward EPS and TOBQ.

CONCLUSION

The main aim of this research was to investigate the impact of corporate governance on the performance of the Top 100 public listed companies with good CG disclosures in Malaysia. The MWSG's selection process involved the identification of top 100 public listed companies with good CG disclosures. Based on the 2019 ranking of top 100 listed companies with good CG disclosures and performance, following the exclusion of companies with incomplete data, the final sample size for data analysis consisted of 81 companies. This study comprised of six independent variables representing corporate governance which were CEO duality, board size, board independence, number of board meetings, number of women directors and number of directors with foreign qualifications. Most of the independent variables were not significant among the dependent variables, EPS, TobinQ and ROE. This research would encourage corporate captains of public listed companies on Bursa Malaysia to enhance their efforts in implementing corporate governance mechanisms.

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