

RELATIONSHIP BETWEEN CORPORATE GOVERNANCE ATTRIBUTES, CEO PAY AND FIRM PERFORMANCE: EVIDENCE FROM PUBLICLY LISTED MALAYSIAN COMPANIES

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ABSTRACT

This study examined the effects of corporate governance attributes, which are CEO duality, Independent director tenure and female director on board to the relationship between CEO pay and firm performance. A total of 100 public companies listed in Bursa from year 2015 to 2019 were observed in this study. Multiple regression analysis was used to test the four hypotheses of study. The findings revealed that CEO pay have a positive relationship with firm performance, and independent director tenure and female director on board have significant influence on the CEO-pay-for-performance. Meanwhile, no significant relationship was found between the CEO duality and CEO-pay-for-performance. The study concluded with a discussion on the contribution, limitations as well as suggestions for future research.

Keywords: Independent Director Tenure, Women on Board, CEO Duality, ROA, NPM, CEO Pay, Moderating Effect

INTRODUCTION

The top 1% wealth shares have dramatically increased from 25-30% in the 1980s to 40% in 2016 and the CEO's compensation is one of the contributors (Zucman, 2019). Regardless of the CEO's capabilities, their pay is influencing the stakeholder and the society, such as a higher pay gap with the employee and its impact to shareholder returns. Over the past 40 years, CEO pay has grown 940% while the worker pay has risen at 12% (Economy Policy Institute, 2019). In 2018, Jeff Fairburn, the chief executive of Permission reported earning per minutes equals to three days salaries of the ordinary worker. Furthermore, that salary is contributed by the government scheme instead of his personal contribution, hence it impacted the company profit (Financier Worldwide, 2020).

However, despite the lower firms earnings during pandemic crisis, there are some Malaysian CEOs that have continued to increase their salary. The Malaysian Reserve (2021) reported at least three CEOs in the banking industry are rewarded with 10% higher salary in financial year 2020 (FY20) compared to FY19 when the respective bank implemented various cost-cutting initiatives and reported lower

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overheads. In 2019, among the top 100 Malaysian public companies, the highest CEO remuneration was RM168million among the public firm and RM33.9million among GLCs, while 81% received RM10 million or less in remuneration. The former Malaysian Finance Minister, Lim Guan Eng pointed out that some companies' CEO is paid relatively high remuneration, with 17 times more than the median CEO pay (The Star, 2019).

Does a higher CEO pay boost a firm's performance? Interestingly, Dan Price, the co-founder of Gravity Payments, took a \$1million pay cut to increase the minimum wage of his staff to \$70k wage, as he believed that is the amount to increase the employee focus on the work and engagement. Following that announcement, new customer inquiries increased from 30 people per month to 2,000 within two weeks. (Inc., 2015) Over the year, the profit of the company has tripled. The firm has seen a 50% revenue drop as they are struck by the Covid pandemic in which the employees voluntarily took a pay cut just to sustain the firm without having the need to lay off any employees (Geek Wire, 2020). Despite the hike in CEO salary over the years, there are also cases that have shown that not all CEOs are greedy. In response to the Covid pandemic, many CEOs took a pay cut to prevent laying off employees. For instance, the CEO of Columbia Sportswear, Tim Boyle, CEO of Marriott Hotel, Arne Sorenson, United Airlines CEO, Oscar Munoz, the CEO of Southwest Airlines, Gary Kelly, CEO of Delta Air Lines Ed Bastian and more (Forbes, 2020). In Malaysia, Genting Malaysia chairman, Tan Sri Lim Kok Thay voluntarily took a 20% pay cut while the Air Asia founders did not take salary following the great loss in company profit due to covid.

As CEO compensation have gained increasing attention, in Malaysia, the Malaysian Code on Corporate Governance (MCCG) 2017 has introduced the best practices to disclose the senior management remuneration. Following that, Corporate Governance (CG) Monitor 2020 found that the total remuneration of the executive directors of companies in the FTSE Bursa Malaysia Top 100 Index (FBM 100) declined by 14.5%. The same report also found an improvement of 16% from 2018 to 2019 regarding the remuneration policies in the company. This means there are more companies evaluate the CEO compensation given is according to the company performance. The other effort on the remuneration transparency including formalized the remuneration policy, elaborate on the board's processes to determine remuneration, and abstained the shareholders who are also a director from voting on their remuneration approval. (SC, 2020)

There are a few underlying corporate governance concerns exist in the disparity of CEO pay. Firstly, increasing CEO salary in the market also indicates the CEO may compare the market price of the other CEO in the market and demand a higher salary. Meanwhile, the salary offered to the CEO solely relying on the market price does not indicate his or her capability or skills in improving the firm performance. Hence, if the firm performance is stagnant while the CEO pay is higher from year to year without proper

govern, CEO compensation itself could impact company profit. This could then reduce the shareholder's confidence. From the society's view point, the large gap between CEO pay could also lead to wealth inequality. According to a study in United States, exorbitant CEO pay is the major reason for wealth inequality and contributes to the larger gap in economic growth between CEO and ordinary workers despite the growth in market share. In Malaysia, the CEOs were paid with 17 times more than the average worker. Furthermore, it is influencing the pay growth of the ordinary workers over the year. The ordinary worker's income would have risen from 7.3% to 13.3% over 1979 to 2018 as if the salary inequality has not grown (Economic Policy Institute, 2020). If CEO pay is increased due to the firm performance, then the employees should be rewarded with the same increment too. Hence, this research is aimed to observe the moderating effect of corporate governance attributes to CEO pay.

LITERATURE REVIEW

Theoretical background

This study is developed based on signaling theory, which has been widely used by scholars in the study relevant to corporate governance and the outsiders of the company. The key of the signalling theory is to identify the signallers, signals, and receivers, to reduce information asymmetry between two or more parties (Connelly et al., 2011; Gambetta and Bacharach, 2001; Spence, 2002). Information asymmetry happens when the latent quality is difficult to obtain or observed by the receivers (Stiglitz, 2000).

Previous study confirms that conceives of CEO compensation is a signal of good corporate governance to the outsiders (Fiss & Zajac, 2016), and corporate governance devices, such as the principles and the boards act as the hidden qualities (Certo, 2003). Therefore Lund (2012) suggests that provides CEO compensation packages tied to market performance signals the firm responsiveness to market demands. The relational signaling framework proposed by Veen and Wittek (2016) finds that the eventually publicly disclosure on CEO compensation is the reason for a sudden hike of the CEO compensation since the 1980s, as the board has to reciprocates their CEO with market compensation and increasing compensation. Therefore, the finding suggests that even though the board able to reduce the rise of CEO pay, it could not stop the rising CEO pay level regardless of the quality of the CEO and the firm performance. However, this finding is not contradict to the above findings as this study observe the factors of the continuous rising of CEO pay level while the previous findings observe the firm performance quality and its effects on CEO pay.

Therefore, according to the signalling theory, the study assumes that the CEO pay as the signaler, firm performance as the signals, and the outsiders (shareholders) as the receivers, with the corporate governance attributes act as hidden qualities. In order to affirm the findings, other aligning theories were used to develop conceptual framework, and will further elaborate in the subtopics below.

Firm performance

Firm performance can be evaluated from a lot of dimension. According to Hult et al., (2008), the firm performance can be divided into three categories, which are the financial performance, operational performance and overall effectiveness. Meanwhile, Žižlavský (2015) categorized performance methods into financial tools (*Balanced Scorecard, budget, cost accounting with or without cost centres, EBITDA, EBIT, economic value added, payback period, revenues from innovation or profitability indicators like ROI, ROE, ROA, ROS*) and non-financial tools (*cannibalization of existing products by innovation, customer satisfaction indicators, growth of market share, innovativeness, number of new customers, patents or productivity and activity indicators*). Meanwhile, Selvam et al. (2016) categorize the performance to the financial performance are such as *profitability performance, market value performance, growth performance* and the strategic performance are such as *employee satisfaction, customer satisfaction, environmental performance, environmental audit performance, corporate governance performance and social performance*. Below is the firm performance determinants' grouping diagram proposed by Selvam et al. (2016). Out of all the indicators, this study chooses to use profitability performances determinants, which are return on asset (ROA) and net profit margin (NPM), as these indicators offers objective evaluation compared to the non-financial or non-profitability performance.

CEO pay and Firm performance

CEO pay structure could reflect the conflict of interest and the corporate governance issues in a firm. For instance, top management could overpower the board when the board is appointed by the management, and hence the board of directors is only presented to legalized company decision that might not be in the interest of shareholders, including the decisions to increase sales or merges and acquisitions that could justify higher executive pay even if it is a conflict with the shareholders' objectives (Tosi & Gomez-Mejia, 1989). Therefore, aligned with the signaling theory, CEO compensation is expected to be measured by the firm performance. The past literatures indicates that the determination of CEO compensation are the managerial labor market, marginal products of CEOs, CEO discretion, firm size, firm performance, and human capital (Finkelstein & Hambrick, 1988; Lin & Lin, 2014). In some studies, the CEO is rewarded with higher compensation as the disparity in CEO pay and non-CEO executive pay does improve the firm performance by attracting more talents and reduced employee turnover. (Pissaris, Heavey, & Golden, 2017; Lee, Lev, & Yeo, 2008)

The relationship between CEO pay and firm performance can be further explained through attribution theory. Attribution theory pointed out that the motivation of an individual to find causes for the outcome by observing internal or external environment or characteristic (Heider, 1985). When doing self-

evaluation, the CEO could make self-attribution to the success of the firm and blaming the environment for the failure (Hayward et al., 2004; Salancik & Meindl, 1984). Meanwhile, external parties or board of director often seeks the organization leader, the CEO as the cause of a firm's behavior and outcome (Hino & Aoki, 2013; Weber & Wiersema, 2017). Also, in some cases, the board of directors could overestimate the CEO's ability in controlling the firm performance (Connelly, et al., 2016). Hence, this theory predicts that the board of directors would compensate the CEO with high pay for positive firm performance and vice versa.

CEO pay and its relationship to firm performance have been observed in the previous literature. A positive relationship between CEO compensation and firm performance is observed by Kang et al. (2002), Hanlon et al., (2003), and Conyon & Freeman (2004). According to Smirnova et al. (2017)'s study on 330 large European firms, a positive relationship between the CEO pay to firm performance is found when there are bonuses linked to accounting performance and internal performance, however, the bonuses linked to market performance does not improve firm performance. Meanwhile, there are also studies confirm a negative relation between CEO compensation and firm performance (Malmendier & Tate, 2009). This further evidenced by the finding of Balafas and Florackis (2013), in which CEO compensated with lower salary outperformed the CEO compensated with high salary in the short-term subsequent returns. Study of Cooper et al. (2013) also find that the CEO pay is negatively impacting future stock returns, and suggests that the high pay inducing overconfidence in CEO, contributing to the wealth losses activities and decisions.

Independent director tenure

Signaling theory suggests that corporate governance attributes as the hidden quality to reduce the information asymmetry to shareholders. The board is expected to monitoring and controlling, and to further protect the shareholder's interest. (Core et al., 2001; Fama & Jensen, 1983; Jensen & Murphy, 1990; Yermack, 1996) The board of directors also accounted for setting the compensation, therefore the compensation committee is set up in the public firms. (Finkelstein & Hambrick, 1988; Boyd, 1994; Barkema & Gomez-Mejia, 1998; Carpenter & Sanders, 2002; Chhaochharia & Grinstein, 2009). Meanwhile, past findings found that the characteristic of an ineffective board included difficulty in obtaining information from the management (Jensen, 1993), a large board with old age and overly busy director and long tenure. (Core et al., 2001; Jensen & Murphy, 1990; Mehran; 1995 Yermack, 1996; Berberich & Niu, 2011) This resulted in the ineffectiveness in board contributes to weak corporate governance and higher CEO pay. Independent director is introduced as it is expected to be able to improve corporate governance and the effectiveness in CEO compensation monitoring (Guthrie et al., 2012; Borokhovich et al., 1996; Fama & Jensen, 1983; Weisbach,1988).

The effect of independent director tenure on CEO pay can be predicted from two opposing perspectives, namely the expertise hypothesis and management-friendliness theory. The expertise hypothesis proposed that the longer the tenure of a director, the more effective the monitoring. This is due to the board with longer tenure have richer experience and knowledge in a certain business environment and the firm while having higher commitment and competency. (Vafeas, 2003) The board with longer tenure also has a higher tendency in asking questions and challenging the CEO. (Bebchuck et al, 2002) These can be further support by the study from Libby & Tan (1994), in which experiences are positively influencing knowledge, motivation, and decision-making ability.

In contrast, management-friendliness theory and CEO allegiance hypothesis, it's predicted that the board tenure would influence the board to be less effective in monitoring the executive, including the CEO. As a result of a long-term relationship between the board and the CEO, and the board would shift its allegiance from shareholders to the executive. Therefore, under this hypothesis, the director tenure would cause the agency problem (Bryd et al., 2010). This hypothesis can be further elaborated with the study of Vafeas (2003), in which directors with 20 or more years of service obtain higher equity investment on the firms and preferred to serve in compensation and nominating committees.

The previous study supports that the excess CEO compensation and director compensation are positively related (Lin & Lin, 2014) and that longer tenure would contribute to CEO allegiance and result in higher CEO compensation (Bryd et al.,2010). Vafeas (2003) also finds that the longer tenure board who participate in compensation committees would provide higher compensation for the CEOs, particularly happens when there is a powerful CEO.

Female on board

Involving and increasing the participation of women on the top management or board has been receiving increasing attention in governance practices. In Malaysia, MCCG enforces large companies must have at least 30% women directors on board since 2017. (SSM, 2017) Even though the adoption of gender diversity has increased by 9.1% from 2018 to 2019, the female representative on board remains low in Malaysia. According to CG monitoring report 2020, there are only 24.82% female directors in the top 100 listed companies and 17.74% female directors out of 5,117 individual directors in Malaysia. (SSM, 2020)

Gender diversity is a good corporate governance device as it increases the board's independence and reduces conflicts of interest. Previous literature has shown the importance of having women on board, such as enhancing the controlling mechanism, allows better decision-making, and better firm performance.

Female directors, in general, would put in extra focus on non-financial performance than solely on financial performance. Female directors also give more thoughts on the risk and controlling (Abdullah & Ku Ismail, 2013, Adams & Ferreira, 2009; Nielsen & Huse, 2010). For example, women directors would ask tougher questions and vote "no" on CEO pay issues than male directors (Konrad et al, 2008). Having women on boards or audit committees was also found to reduce earnings management (Abdullah & Ku Ismail, 2016; Qi & Tian, 2012) and increase earning quality (Srinidhi et al, 2008). The higher monitoring actions could alleviate conflicts of interest between managers and shareholders. (Merridee and McConomy, 2010) Therefore the greater gender diversity could increase accountability, transparency, and moral duty, and boosts the confidence of investors. (Galbreath, 2011; Capezio & Mavisakalyan, 2016)

The firm that recruits directors with high similarity in background, training, and networks could contribute to groupthink. Having a female representative on board could provide diverse perspectives and work experiences that are different from male directors. (Daily and Dalton, 2003; Hillman et. al, 2002) Female directors are also more participative and process-oriented, (Lucas-Pérez et al., 2015) security-oriented, less traditional, and less power-oriented. (Adams & Funks, 2012) Consequently, it enhances unique decision-making and improves the performance of the firm.

Also, women directors are as qualified as male directors. Daily and Dalton (2003) and Hillman et. al (2002) suggest that there are more women enrolled in a higher level of education and experience, and women are more likely to want to improve creativity and innovation. In Malaysia itself, there are also pools of talents with tertiary qualifications to be selected. In 2018, the total female graduated from university was 50.4 percent or 2.01 million persons. (DOSM, 2019)

However, the results from former literature on the influence of gender diversity on corporate governance and firm performance are not conclusive. Shettima & Dzolkarnaini (2018) finds that gender diversity could not replace a weak governance structure. Other studies find that there is no significant or weak relationship between board gender diversity and firm performance. (Rafinda et al, 2018; Ozatac, 2011; Ahmad & Alshbie, 2016)

Meanwhile, there are also previous studies specified on the gender diversity inboard to the CEO pay in other countries. The result shows that gender diversity in the board can strengthen the CEO pay and firm performance linkage while limiting the total cash compensation on CEO pay in China (Usman et al, 2018) and in Pakistan (Usman et al, 2018). Benkraiem et al (2017), suggest that the presence of independent women directors improves the monitoring of CEO pay. Finding from Owen and Temesvary (2019) suggests that higher diverse boards could contribute to compensation inequality at banks, however, this doesn't apply to the bank when women have higher representation on the board.

CEO duality

CEO duality could contribute to corporate governance issue as the CEO can influence the authorities to make decision appeal to self-interest. (Jensen, 1993) Most of the previous literature shows that CEO duality could escalate to corporate governance issues, such as lack of board independence, conflicts of interest, monitoring issues, and ultimately, poor firm performance.

The main concern on CEO duality in corporate governance is the managerial power theory. This theory explains the power concentration in an individual could influence the board's decision-making (Finkelstein & D'Aveni, 1994). Influences contributed by the duality roles include restricting the information flows among the board (Pearce & Zahra, 1992; Bebchuk & Fried, 2004), create powerful CEO, lower cross-checking from subordinates, and lack of transparency in the nomination of new directors (Westphal & Zajac, 1995). This could increase the retrenchment of the CEO, decrease the board monitoring effectiveness, (Nuanpradit, 2019), and contribute to firm performance inefficiency (Sheikh & Karim, 2015). CEO duality could also weaken pay-performance sensitivity. The previous literature found that CEO duality would increase the executives' pay (Essen et al., 2015; Conyon & He, 2012). The pay-performance sensitivity is low with the presence of CEO duality (Boyd et al., 2011; Essen et al., 2015; Ataay, 2018).

Despite the above viewpoints, in some cases, duality CEO can enhance firm performance. For example, it could enhance unified command in an organization (Garas & ElMassah, 2018), and the same person holding duality roles over the years can also provide clarity in roles and responsibility on the board (Sheikh & Karim, 2015). In this case, the optimal contracting theory suggests that duality CEO should be compensated with a higher fixed and incentive package that is closely tied to firm performance (Dey et al, 2011) to avoid agency problems (Core, Guay & Larcker, 2003; Murphy, 1999).

However, both managerial power theory and optimal contracting theory are not contradicts as they both predict a higher compensation level when CEO duality exists. Ya'acob (2015) finds that the CEO duality would incur higher compensation in Malaysia. According to Broye et al. (2017), firms that implement CEO duality would entail a higher CEO compensation to avoid conflicts of interest, however, considering the CEO also holding director position, the compensation is no higher. Another study found no relation between duality and CEO compensation (Brickley et al., 1997; Capezio et al., 2011)

Hypotheses development

Based on the main findings and theories discussed in the previous subsections, these are the proposed hypotheses:

H1 CEO Pay has a positive relationship with firm performance.

H2 Independent director tenure moderates the relationship between CEO pay and firm performance.

H3 Board gender diversity moderates the relationship between CEO pay and firm performance.

H4 CEO duality moderates the relationship between CEO pay and firm performance.

Conceptual framework

A conceptual framework is developed based on the literature findings demonstrated in the previous subsections.

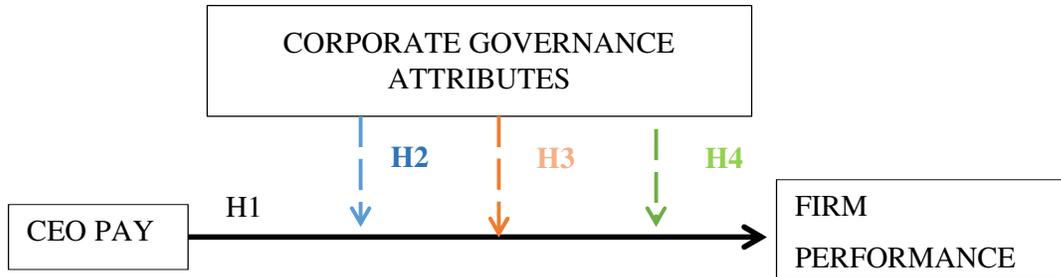


Figure 2.2 Theoretical Framework

Remarks:

H1 – H4 : Signaling theory

H1 : Further supported by Attribution theory

H2 : Further supported by expertise hypothesis and management-friendliness theory

H4 : Further supported by managerial power theory and optimal contracting theory

RESEARCH METHODOLOGY

Sample size

This study observe the sample of 100 Malaysian firms listed in Bursa between 2015 to 2019 with CEO remuneration or managing director remuneration disclosure, the sample of this study will be 500 (100 companies x 5 years). Thus it fulfils the sample size requirements proposed by Sekaran (2003) and Hair et al., (1998).

Sources of Data

Secondary data is use in this study. The secondary data used in this study are the annual reports of the target population. The annual reports used in this study were obtained from the firms' websites or Bursa Malaysia in case they are not published accordingly in the websites.

Dependent Variable

Firm performance

Two types of measurement are used to evaluate the firm performance of this study, which are return on asset (ROA) and net profit margin (NPM). The ROA will be computed using formula of net profit divided by asset, while the net profit margin will be computed using net profit divide by total revenue.

Independent Variable

CEO Pay

The total cash remuneration of the CEO, executive director, or managing executive director will be use as the measurement for this independent variable. The total CEO remuneration is calculated based on their basic salary, bonus, allowances, fees, benefits-in-kinds and pension benefits. For annual report that does not disclose an exact CEO remuneration amount, the average amount from the executive remuneration range from the annual report will be measured.

Moderating Variable

CEO Duality

CEO duality is measured with dummy variable coded “1” if the CEO or the managing director or the executive director is also the Chairman of the board.

Vice versa, dummy variable coded “0” will be used for the absence of CEO duality.

Tenure of Independent Director

Tenure of the independent director will be measured using the average tenure of the independent directors on the board. The data is computed by total tenure of the independent directors divided by the total number of the independent director.

Female on board

Female on board is computed using the percentage of female representatives on the board. The ratio is calculated using number of female directors divided by total number of female directors.

Control Variable

Firm Size

Previous study found that the firm size have an effect on the firm performance (Core et al., 1999; Hartarska, 2005; Core et al., 2016). Therefore, firm size is an important determinant of the firm performance and could influence the outcomes of this research. Based on these considerations, the effect of the firm size will be controlled. The firm size is measured by the log of total assets of the firm.

RESULT AND DISCUSSION

Diagnostic Test Result

The collected data have gone through two diagnostic tests to ensure the reliability, namely normality test and multicollinearity test.

Normality Test

In this study, there were initially four outliers in both ROA and Independent director tenure, after verified the data, the outliers are winsorized to the highest value acceptable by the normality test. After winsorized, the results of the normality test on 500 samples are summarised in the table 4.1 and table 4.2 below.

Table 4.1: Skewness and Kurtosis

		ROA	NPM	FS	CP	CD	IDT	BG
N	Valid	500	500	500	500	500	500	500
	Missing	0	0	0	0	0	0	0
Skewness		2.478	2.395	.563	-.084	1.671	1.496	.436
Std. Error of Skewness		.109	.109	.109	.109	.109	.109	.109
Kurtosis		8.129	7.102	-.027	.909	.795	2.835	.504
Std. Error of Kurtosis		.218	.218	.218	.218	.218	.218	.218

Note:

ROA is the return on assets, NPM represents net profit margin, FS represents firm size, CP represents CEO pay, CD represents CEO duality, IDT represents Independent director tenure, and BG represents female on board.

Table 4.2 (Continue) Skewness and Kurtosis

		CPCD	CPIDT	CPBG	FSCD	FSIDT	FSBG
N	Valid	500	500	500	500	500	500
	Missing	0	0	0	0	0	0
Skewness		1.689	1.558	.471	1.805	1.875	.918
Std. Error of Skewness		.109	.109	.109	.109	.109	.109
Kurtosis		.888	3.279	.301	1.471	6.121	.895
Std. Error of Kurtosis		.218	.218	.218	.218	.218	.218

Note:

CPCD represents interaction between CP and CD, CPIDT represents interaction between CP and IDT, CPBG represents the interaction between CP and BG, FSCD represents the interaction between FS and CD, FSIDT represents the interaction between FS and IDT, FSBG represents the interaction between FS and BG.

Multicollinearity

Multicollinearity test has been done on the independent variable (CEO pay) and the control variable (Firm Size). Existence of multicollinearity could cause problem during data analysis and affecting the t-values during regression coefficient analysis. Table 4.3 below shows the computed collinearity statistics. Based on the table below, the variance inflation factor (VIF) is at 1.448. As the VIF is less than 10, it indicates that no multicollinearity effect between the independent variable and the control variables when the dependent variable is ROA and NPM.

Table 4.3 Collinearity statistic

Model 1 & 2	Tolerance	VIF
FS	.690	1.448
CP	.690	1.448

Pearson Correlation Analysis

Both of the CEO pay and firm size does influence the ROA and NPM. There is also a weak negative relationship between CEO pay and ROA with coefficient of -0.122. This indicates that the larger the firm size and CEO pay, the lower the ROA. A moderate negative relationship between firm size and ROA is found with a value of -0.414. Meanwhile, the firm size has a higher positive correlation to NPM as compared to CEO pay, with the coefficient of 0.216 and 0.142 respectively.

Table 4.4 Pearson's correlation matrix between variables

		ROA	NPM	FS	CP
ROA	Pearson Correlation	1	.229**	-.414**	-.122**
	Sig. (2-tailed)		.000	.000	.006
	N	500	500	500	500
NPM	Pearson Correlation	.229**	1	.216**	.142**
	Sig. (2-tailed)	.000		.000	.001
	N	500	500	500	500
FS	Pearson Correlation	-.414**	.216**	1	.556**
	Sig. (2-tailed)	.000	.000		.000
	N	500	500	500	500
CP	Pearson Correlation	-.122**	.142**	.556**	1
	Sig. (2-tailed)	.006	.001	.000	
	N	500	500	500	500

Regression Analysis

Multiple regression analysis was used in analysing the relationships of the variables in the two models proposed. A positive value indicates the variation can be explained and vice versa. The table on the computed regression model summary as follow:

Table 4.5 Regression Model Summary

	Model 1: ROA	Model 2: NPM
R	.470 ^a	.263 ^a
R Square	0.221	0.069
Adjusted R Square	0.209	0.054
Std. Error of the Estimate	0.06719	0.14137

a. Predictors: (Constant), FSBG, FSIDT, FSCD, CP, FS, CPBG, CPIDT, CPCD

F-value in ANOVA analysis (table 4.6) indicates the overall significance of the regression model. The p-value less than 0.05 indicate a significant relationship between variables. Beta or β from the multi regression table shows the degree of correlation of the variables.

Table 4.6 ANOVA analysis

	ROA					NPM				
	Sum of Squares	df	Mean Square	F	Sig.	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.63	8	0.079	17.435	.000 ^b	0.732	8	0.091	4.577	.000 ^b
Residual	2.217	491	0.005			9.813	491	0.02		
Total	2.847	499				10.545	499			

Predictors: (Constant), FSBG, FSIDT, FSCD, CP, FS, CPBG, CPIDT, CPCD

The correlation between CEO pay with firm performance is inconclusive. The CEO pay is significantly positive correlated to the ROA ($\beta = .118$, $p = .037$), but the relationship between CEO pay and NPM is insignificant. The corporate governance attributes that have impacts to the correlation between CEO pay and firm performance is percentage of women on board and independent director tenure. Statistic shows that the percentage of female on board can strengthen the link between CEO pay and ROA ($\beta = .517$, $p = .002$). Even though the CEO pay is insignificantly correlates to the NPM, the independent director tenure have a positive impact on the relationship between CEO pay and ROA ($\beta = .38$, $p = .093$). CEO duality does not have any significant impact on the relationship between CEO pay and firm performance. Meanwhile, the firm size has a significant negative relationship with ROA ($\beta = -.381$, $p = .002$) and a positive relationship with NPM ($\beta = .28$, $p = .035$). It means when firm size increases, it decreases ROA while increases the NPM. The percentage of women on board ($\beta = -.444$, $p = .026$) and independent director tenure weaken the relationship between firm size and NPM ($\beta = -.477$, $p = .035$). CEO duality has no significant impact on the relationship between firm size and firm performance.

DISCUSSION AND RECOMMENDATIONS

Table 4.7 Multi Regression Analysis

	ROA					NPM				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta			B	Std. Error	Beta		
(Constant)	0.053	0.044	0	1.201	0.230	0.033	0.093	0	0.351	0.726
FS	-0.014	0.004	-0.381	-3.144	0.002	0.019	0.009	0.28	2.114	0.035
CP	0.008	0.004	0.118	2.096	0.037	-0.003	0.008	-0.026	-0.416	0.678
CPCD	0.003	0.003	0.205	0.815	0.415	-0.002	0.007	-0.065	-0.238	0.812
CPIDT	0.00	0.000	-0.019	-0.092	0.927	0.001	0.001	0.38	1.685	0.093
CPBG	0.021	0.007	0.517	3.090	0.002	-0.012	0.014	-0.162	-0.885	0.377
FSCD	0.00	0.007	-0.159	-0.643	0.520	0.005	0.014	0.09	0.334	0.738
FSIDT	0.00	0.000	-0.032	-0.155	0.877	-0.002	0.001	-0.477	-2.118	0.035
FSBG	-0.002	0.001	-0.444	-2.231	0.026	0.002	0.002	0.224	1.027	0.305

Summary of Findings

The result shows a significant positive relationship between the CEO pay and ROA. It means that CEO in Malaysian public firms is evaluated based on the increases net profit per unit of total asset. This especially reflects during the incident of covid in 2019, the CEO or executive directors took a pay cut as the company financial performance has dropped. At the same time, this study found that the percentage of female on board have a positive impact on the CEO-pay-for-performance. Higher percentage of female director on board strengthens the relationship between CEO pay and firm performance. This confirmed that presence of female directors on the board is an effective corporate governance device when it comes to CEO-pay-for-performance. As of independent director tenure, it is found that the higher tenure of independent director has a higher moderating effect on the CEO-pay-for-performance. Hence, the management friendliness theory is not valid in the observed samples. This can also indicates that the higher tenure of independent director does not lose the independences when it comes to CEO-pay-for-performance. Lastly, the CEO duality does not have moderating effect on the CEO-pay-for-performance. This indicates that the Malaysian public firms in general have a good corporate practice when it comes to CEO-pay-for-performance, therefore assuming that there's absence of powerful CEO who can moderate the CEO-pay-for-performance.

Implication of the Study

This study has made a contribution to the existing literatures and to the industry. The topic of CEO pay is gaining the attention in Malaysia especially after the encouragement of disclosing the CEO remuneration during MCCG 2017. The previous literatures on the CEO-pay-for-performance in Malaysian public firms mostly observed from year 2010 to year 2015, therefore the observation on the impact of the CEO remuneration disclosure was not obvious. Furthermore, this study provided evidences that the corporate governance attributes such as percentage of female directors and the independent director tenure can affect the CEO-pay-for-performance. It is found that the higher percentage of female directors can promote better governance in CEO-pay-for-performance. This study also indicates that the independent director tenure not necessarily bring a negative impact to CEO-pay-for-performance as assumed in the management friendliness theory. Instead, higher independent director tenure actually promotes a better governance on CEO-pay-for-performance.

Limitation of the Study

This study uses annual report gathered from the respective company website as main data source, therefore the findings are highly dependent on the accuracy of the annual report submitted by each company. In addition, there are more aspects to look into when it comes to firm performance. This study observed the impact on financial performance of the company, but the CEO also plays a huge role in ensuring an effective strategic performance such as employee satisfaction and social performance. In fact, corporate governance embraces a bigger set of variables. This study only uses three corporate governance attributes to measure the moderating effect. Following the more transparency corporate governance information in the annual reports, there are more attributes that can be used to obtain a complete view on the effects of corporate governance to the CEO-pay-for-performance. Meanwhile, the scenario in problem statement in which the CEO pay is the CEO rewarded for performance while the employee did not, contributing to the larger pay gap between CEO and employee is not cater in this study. This is due to the current reporting in Malaysia does not disclose such information therefore the data for the research could not be identify.

Recommendation for Future Study

Based on the limitation mentioned, there are several recommendations for the future research. Firstly, the firm performance aspects used in the test result can be evaluated from other aspects, such as the social performance and employee satisfaction of the firm. This is due to current research is highly dependent on financial reporting standards and practises of the selected companies. Secondly, future research should study on the other influences of corporate governance attributes on the CEO-pay-for-performance. Lastly, researcher recommends the future research to test the gap of CEO-pay-for-

performance and employee-pay-for-performance if there is disclosure on the relevant data and information in the future corporate governance reporting.

REFERENCES

- Abdullah, Shamsul & Ku Ismail, Ku Nor Izah. (2013). Gender, Ethnic and Age Diversity of the Boards of Large Malaysian Firms and Performance. *Jurnal Pengurusan*. 38. 27-40. 10.17576/pengurusan-2013-38-03.
- Abdullah, Shamsul & Ku Ismail, Ku Nor Izah & Nachum, L.. (2016). Does Having Women on Boards Create Value? The Impact of Societal Perceptions and Corporate Governance in Emerging Markets. *Strategic Management Journal*. 37. 466-476. 10.1002/smj.2352.
- Adams, Renee & Ferreira, Daniel. (2009). Women in the Boardroom and Their Impact on Governance and Performance. *Journal of Financial Economics*. 94. 291-309. 10.1016/j.jfineco.2008.10.007.
- Adams, Renee & Funk, Patricia. (2012). Beyond the Glass Ceiling: Does Gender Matter?. Working Papers (Universitat Pompeu Fabra. Departamento de Economía y Empresa), N°. 1172, 2009. 58. 10.2307/41406385.
- Ahmad, M. A., & Alshbiel, S. O. (2016). Women in Jordanian banks and performance: Financial accounting measurement. *Risk Governance and Control: Financial Markets and Institutions*, 6(3), 5–15. <https://doi.org/10.22495/rcgv6i3c1art1>
- Ataay, Aylin. (2018). Performance sensitivity of executive pay: the role of ownership structure, board leadership structure and board characteristics. *Economic Research-Ekonomska Istraživanja*. 31. 1152-1168. 10.1080/1331677X.2018.1456951.
- Bacharach, Michael & Gambetta, Diego. (2001). Trust in Signs. *Basic econometrics by Damodar N Gujarati (2003–12-23)*. (1784). McGraw Hill.
- Balafas, Nikolaos and Florackis, Chris, CEO Compensation and Future Shareholder Returns: Evidence from the London Stock Exchange (July 04, 2014). *Journal of Empirical Finance*, vol. 27, pp. 97-115, Available at SSRN: <https://ssrn.com/abstract=2346861> or <http://dx.doi.org/10.2139/ssrn.2346861>
- Bebchuk, LA & Fried, JM & Walker, DI. (2002). Managerial power and rent extraction in the design of executive compensation. *The University of Chicago Law Review*. 69. 751-846. 10.2307/1600632.
- Bebchuk, L., & Fried, J. (2006). Pay without Performance: Overview of the Issues. *Academy of Management Perspectives*, 20(1), 5-24. Retrieved April 25, 2021, from <http://www.jstor.org/stable/4166216>
- Berberich, Greg & Niu, Flora. (2011). Director Busyness, Director Tenure and the Likelihood of Encountering Corporate Governance Problems. *SSRN Electronic Journal*. 10.2139/ssrn.1742483.
- Benkraiem, Ramzi & Hamrouni, Amal & Lakhali, Faten & Toumi, Nadia. (2017). Board Independence, Gender Diversity and CEO Compensation. *Corporate Governance: The international journal of business in society*. 17. 00-00. 10.1108/CG-02-2017-0027.
- Broye, Géraldine & François, Abel & Moulin, Yves. (2017). The cost of CEO duality: Evidence from French leadership compensation. *European Management Journal*. 35. 10.1016/j.emj.2017.01.007.
- Brickley, J.A. & Coles, Jeffrey & Jarrell, G.. (1995). Corporate Leadership Structure: On the Separation of the Positions of CEO and Chairman of the Board.. *Journal of Corporate Finance*. 3.
- Burkart, M., & Lee, S. (2015). Signalling to Dispersed Shareholders and Corporate Control. *The Review of Economic Studies*, 82(3), 922–962. <https://doi.org/10.1093/restud/rdv005>
- Bujaki, M., & McConomy, B. J. (2002). Corporate Governance: Factors Influencing Voluntary Disclosure by Publicly Traded Canadian Firms*. *Canadian Accounting Perspectives*, 1(2), 105–139. <https://doi.org/10.1506/9fn9-ecc9-7gl7-25nt>
- Borokhovich, K., Parrino, R., & Trapani, T. (1996). Outside Directors and CEO Selection. *The Journal of Financial and Quantitative Analysis*, 31(3), 337-355. doi:10.2307/2331395
- Boyd, B. (1994). Board Control and CEO Compensation. *Strategic Management Journal*, 15(5), 335-344. Retrieved April 25, 2021, from <http://www.jstor.org/stable/2486778>

- Brown, T. A. (2006). *Confirmatory Factor Analysis for Applied Research, First Edition (Methodology in the Social Sciences)* (First ed.). The Guilford Press.
- Black, K. (2011). *Business Statistics: For Contemporary Decision Making* (7th ed.). Wiley.
- Byrd, J., Cooperman, E. S., & Wolfe, G. A. (2010). Director tenure and the compensation of bank CEOs. *Managerial Finance*, 36(2), 86–102. <https://doi.org/10.1108/03074351011014523>
- Capezio, Alessandra & Mavisakalyan, Astghik. (2015). Women in the boardroom and fraud: Evidence from Australia. *Australian Journal of Management*. 41. 10.1177/0312896215579463.
- Capezio, Alessandra & Shields, John & O'Donnell, Michael. (2011). Too Good to be True: Board Structural Independence as a Moderator of CEO Pay-for-Firm-Performance. *Journal of Management Studies*. 48. 487-513. 10.1111/j.1467-6486.2009.00895.x.
- Certo, S. T. (2003). Influencing Initial Public Offering Investors with Prestige: Signaling with Board Structures. *The Academy of Management Review*, 28(3), 432. <https://doi.org/10.2307/30040731>
- CEO compensation has grown 940% since 1978: Typical worker compensation has risen only 12% during that time. (2019). Economic Policy Institute. <https://www.epi.org/publication/ceo-compensation-2018/>
- Chhaochharia, V., & Grinstein, Y. (2008). CEO Compensation and Board Structure. *SSRN Electronic Journal*, 231–261. <https://doi.org/10.2139/ssrn.901642>
- Churchill, G & Iacobucci, Dawn. (2002). Marketing research: Methodological foundations.
- Conyon, Martin & Freeman, Richard. (2002). Shared Modes of Compensation and Firm Performance: UK Evidence.
- Conyon, M. J., & He, L. (2012). CEO Compensation and Corporate Governance in China. *Corporate Governance: An International Review*, 20(6), 575–592. <https://doi.org/10.1111/j.1467-8683.2012.00935.x>
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2010). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Connelly, B. L., Haynes, K. T., Tihanyi, L., Gamache, D. L., & Devers, C. E. (2016). Minding the gap: Antecedents and consequences of top management-to-worker pay dispersion. *Journal of Management*, 42(4), 862–885. <https://doi.org/10.1177/0149206313503015>
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2010). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39–67. <https://doi.org/10.1177/0149206310388419>
- Cooper, Michael & Gulen, Huseyin & Rau, P.. (2013). Performance for Pay? The Relation Between CEO Incentive Compensation and Future Stock Price Performance. 10.2139/ssrn.1572085.
- Core, J. E. and Guay, W. R. and Larcker, D. F., Executive Equity Compensation and Incentives: A Survey. *Economic Policy Review*, Vol. 9, No. 1, April 2003, Available at SSRN: <https://ssrn.com/abstract=794806>
- Corporate Governance Monitor* 2020. (2020b). Securities Commission Malaysia. <https://www.sc.com.my/api/documentms/download.ashx?id=ff69ce0d-a35e-44d4-996a-c591529c56c7>
- Crandall, Chris & Silvia, Paul & N'gbala, Ahogni & Tsang, Jo-Ann & Dawson, Karen. (2007). Balance Theory, Unit Relations, and Attribution: The Underlying Integrity of Heiderian Theory. *Review of General Psychology*. 11. 12-30. 10.1037/1089-2680.11.1.12.
- Darusalam, Ghazali & Hussin, Sufean. (2016). Metodologi Penyelidikan Dalam Pendidikan : Amalan dan Analisis Kajian.
- Daily, C., Dalton, D., & Cannella, A. (2003). Corporate Governance: Decades of Dialogue and Data. *The Academy of Management Review*, 28(3), 371-382. doi:10.2307/30040727
- Dey, A., Engel, E., & Liu, X. (2011). CEO and board chair roles: To split or not to split? *Journal of Corporate Finance*, 17(5), 1595–1618. <https://doi.org/10.1016/j.jcorpfin.2011.09.001>
- Dunn, S. L., Arslanian-Engoren, C., DeKoekkoek, T., Jadack, R., & Scott, L. D. (2015). Secondary Data Analysis as an Efficient and Effective Approach to Nursing Research. *Western Journal of Nursing Research*, 37(10), 1295–1307. <https://doi.org/10.1177/0193945915570042>

Essen, Marc & Otten, Jordan & Carberry, Edward. (2015). Determinants of CEO Compensation and Managerial Power Theory: A Meta-Analytic Approach. *Journal of Management*. 41.

Fama, Eugene F. and Jensen, Michael C., Separation of Ownership and Control. Michael C. Jensen, FOUNDATIONS OF ORGANIZATIONAL STRATEGY, Harvard University Press, 1998, and *Journal of Law and Economics*, Vol. 26, June 1983, Available at SSRN: <https://ssrn.com/abstract=94034> or <http://dx.doi.org/10.2139/ssrn.94034>

Finkelstein, S., & Hambrick, D. C. (1988). Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal*, 9(6), 543–558. <https://doi.org/10.1002/smj.4250090603>

Finkelstein, S., & D'Aveni, R. (1994). CEO Duality as a Double-Edged Sword: How Boards of Directors Balance Entrenchment Avoidance and Unity of Command. *The Academy of Management Journal*, 37(5), 1079-1108. doi:10.2307/256667

Forbes (2020, March 30). *CEOs Are Cutting Their Own Salaries In Response To The Coronavirus*. Forbes. <https://www.forbes.com/sites/jackkelly/2020/03/30/ceos-are-cutting-their-own-salaries-in-response-to-the-coronavirus/?sh=26cc5b593e91>

Finkelstein, S., & Hambrick, D. C. (1988). Chief executive compensation: A synthesis and reconciliation. *Strategic Management Journal*, 9(6), 543–558. <https://doi.org/10.1002/smj.4250090603>

Fiss, P. C., & Zajac, E. J. (2006). The Symbolic Management of Strategic Change: Sensegiving Via Framing and Decoupling. *Academy of Management Journal*, 49(6), 1173–1193. <https://doi.org/10.5465/amj.2006.23478255>

Garas, Samy & Elmassah, Suzanna. (2018). critical perspectives on international business Corporate governance and corporate social responsibility disclosures: The case of GCC countries Article information: For Authors Corporate governance and corporate social responsibility disclosures The case of GCC countries. *Critical Perspectives on International Business*. 14. 10.1108/cpoib-10-2016-0042.

Galbreath, Jeremy. (2011). Are there gender-related influences on corporate sustainability? A study of women on boards of directors. *Journal of Management & Organization*. 17. 17-38. 10.1017/S1833367200001693.

GeekWire (2020) *gravity Payments employees volunteer to take pay cut as revenue drops 50% during COVID-19 crisis*. (2020). GeekWire. <https://www.geekwire.com/2020/gravity-payments-employees-volunteer-take-pay-cut-company-sees-revenue-dive-50-crisis/>

Getting it right – the challenges of executive compensation. (2020). Financier Worldwide. <https://www.financierworldwide.com/getting-it-right-the-challenges-of-executive-compensation#.YIVoe5Azb6o>

Gill, J., & Johnson, P. (2010). *Research Methods for Managers* (Fourth ed.). SAGE Publications Ltd.

Guthrie, James & Ricceri, Federica & Dumay, John. (2012). Reflections and projections: A decade of Intellectual Capital Accounting Research. *The British Accounting Review*. 44. 68–82. 10.1016/j.bar.2012.03.004.

Hair, J.F.J. & Black, William & Babin, Barry & Anderson, Rolph & Tatham, R.L.. (2006). *Multivariate Data Analysis*.

Hartarska, Valentina. (2005). Governance and Performance of Microfinance Organizations in Central and Eastern Europe and the Newly Independent States. *World Development*. 33. 1627-1643. 10.2139/ssrn.542602.

Hanlon, M., Rajgopal, S., & Shevlin, T. J. (2004). Are Executive Stock Options Associated with Future Earnings? *SSRN Electronic Journal*, 3–43. <https://doi.org/10.2139/ssrn.318101>

Hayward, Mathew & Rindova, Violina & Pollock, Timothy. (2004). Believing one's own press: The causes and consequences of CEO celebrity. *Strategic Management Journal*. 25. 10.1002/smj.405.

Hino, K., & Aoki, H. (2013). Romance of leadership and evaluation of organizational failure. *Leadership & Organization Development Journal*, 34(4), 365–377. <https://doi.org/10.1108/LODJ-08-2011-0079>

Hillman, Amy & Cannella, Albert & Harris, Ira. (2002). Women and Racial Minorities in the Boardroom: How Do Directors Differ?. *Journal of Management - J MANAGE*. 28. 747-763. 10.1177/014920630202800603.

Hult, G. Tomas M. & Ketchen, David & Griffith, David & Chabowski, Brian & Hamman, Mary & Dykes, Bernadine & Pollitte, Wesley & Cavusgil, S.. (2008). An Assessment of the Measurement of Performance In International Business Research. *Journal of International Business Studies*. 39. 1064-1080. 10.1057/palgrave.jibs.8400398.

- Inc. (2021, January 6). *Here's What Really Happened at That Company That Set a \$70,000 Minimum Wage*. Inc.Com. <https://www.inc.com/magazine/201511/paul-keegan/does-more-pay-mean-more-growth.html>
- Jensen, M., & Murphy, K. (1990). Performance Pay and Top-Management Incentives. *Journal of Political Economy*, 98(2), 225-264. Retrieved April 25, 2021, from <http://www.jstor.org/stable/2937665>
- Kang, J., Karim, K.E. and Rutledge, R.W. (2002), "An empirical analysis of the association between CEO compensation and firm performance: A relative excess value ratio approach", *Research in Finance (Research in Finance, Vol. 19)*, Emerald Group Publishing Limited, Bingley, pp. 61-85. [https://doi.org/10.1016/S0196-3821\(02\)19004-6](https://doi.org/10.1016/S0196-3821(02)19004-6)
- Konrad, Alison & KRAMER, VICKI & Erkut, Sumru. (2008). Critical Mass:: The Impact of Three or More Women on Corporate Boards. *Organizational Dynamics*. 37. 145–164. 10.1016/j.orgdyn.2008.02.005.
- Lee, Kin & Lev, Baruch & Yeo, Gillian. (2008). Executive Pay Dispersion, Corporate Governance and Firm Performance. *Review of Quantitative Finance and Accounting*. 30. 315-338. 10.1007/s11156-007-0053-8.
- Libby, R., & Tan, H. T. (1994). Modeling the determinants of audit expertise. *Accounting, Organizations and Society*, 19(8), 701–716. [https://doi.org/10.1016/0361-3682\(94\)90030-2](https://doi.org/10.1016/0361-3682(94)90030-2)
- Lin, Dan and Lin, Lu, The Interplay between Director Compensation and CEO Compensation (2014). *The International Journal of Business and Finance Research*, Vol. 8 (2) pp. 11-26, 2014, Available at SSRN: <https://ssrn.com/abstract=2322827>
- Lucas-Perez, M. & Vera, Antonio & Baixauli, J. & Martín-Ugedo, Juan & Sánchez-Marín, Gregorio. (2014). Women on the Board and Managers' Pay: Evidence from Spain. *Journal of Business Ethics*. 129. 10.1007/s10551-014-2148-1.
- Lund, A. C. W. (2012). COMPENSATION AS SIGNALING. *FLORIDA LAW REVIEW*, 591–638. http://www.floridalawreview.com/wp-content/uploads/Lund_BOOK.pdf
- Malaysian Code on Corporate Governance 2017*. (2017). Securities Commission Malaysia. <https://www.sc.com.my/api/documentms/download.ashx?id=70a5568b-1937-4d2b-8cbf-3aefed112c0a>
- Malhotra, Neeru & Budhwar, Pawan & Prowse, Peter. (2007). Linking Rewards to Commitment: An Empirical Investigation of Four UK Call Centres. *International Journal of Human Resource Management*. 18. 10.1080/09585190701695267.
- Malmendier, U., & Tate, G. (2009). Superstar CEOs. *The Quarterly Journal of Economics*, 124(4), 1593-1638. Retrieved April 25, 2021, from <http://www.jstor.org/stable/40506267>
- Mehran, H. (1995). Executive compensation structure, ownership, and firm performance. *Journal of Financial Economics*, 38(2), 163–184. [https://doi.org/10.1016/0304-405x\(94\)00809-f](https://doi.org/10.1016/0304-405x(94)00809-f)
- Nielsen, S., & Huse, M. (2010). The Contribution of Women on Boards of Directors: Going beyond the Surface. *Corporate Governance: An International Review*, 18(2), 136–148. <https://doi.org/10.1111/j.1467-8683.2010.00784.x>
- Nuanpradit, Sirada. (2019). Real earnings management in Thailand: CEO duality and serviced early years. *Asia-Pacific Journal of Business Administration*. 11. 10.1108/APJBA-08-2018-0133.
- Owen, Ann & Temesvary, Judit. (2018). The Performance Effects of Gender Diversity on Bank Boards. *Journal of Banking & Finance*. 90. 10.1016/j.jbankfin.2018.02.015.
- Ozatic, Nesrin. (2011). Gender diversity in board of directors and top management: The case of Turkish banks. *Actual Problems of Economics*. 115. 311-319.
- Osman, M.N.H. (2011). Post-Positivism and Accounting Research. In *Research in Accounting & Islamic Finance*. Selangor, Malaysia: UPM Press)
- Parasuraman, A Parsu & Zeithaml, Valarie & Berry, Leonard. (1994). Alternative Scales for Measuring Service Quality—A Comparative-Assessment Based on Psychometric and Diagnostic Criteria. *Journal of Retailing*. 70. 201-230. 10.1016/0022-4359(94)90033-7.
- Pallant (2016). *SPSS Survival Manual* (6th ed.). Open University Press.
- Pearce, John & Zahra, Shaker. (2007). Board composition from a strategic contingency perspective. *Journal of Management Studies*. 29. 411 - 438. 10.1111/j.1467-6486.1992.tb00672.x.

- Pissaris, Seema & Heavey, Angela & Golden, Peggy. (2015). Executive Pay Matters: Looking Beyond the CEO to Explore Implications of Pay Disparity on Non-CEO Executive Turnover and Firm Performance. *Human Resource Management*. 56. n/a-n/a. 10.1002/hrm.21766.
- Qi, Baolei and Gaoliang Tian. (2012). The Impact of Audit Committees' Personal Characteristic on Earnings Management. *Journal of Applied Business Research*, 28(6), November/December, 1331-1343.
- Rafinda, Ascariena & Witiastuti, Rini & Suroso, Agus & Trinugroho, Irwan & Rafinda, Ascaryan. (2018). Board diversity, risk and sustainability of Bank Performance: Evidence from India. *Journal of Security and Sustainability Issues*. 7. 793-806. 10.9770/jssi.2018.7.4(15).
- Reifman, A., & Keyton, K. (2010). Winsorize. In *Encyclopedia of Research Design* (pp. 1636-1638). Thousand Oaks, CA: Sage
- Roscoe, J.T. (1975) *Fundamental Research Statistics for the Behavioral Sciences* [by] John T. Roscoe. Holt, Rinehart and Winston, New York.
- Rothschild, M., & Stiglitz, J. (1976). Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information. *The Quarterly Journal of Economics*, 90(4), 629. <https://doi.org/10.2307/1885326>
- Ryan, Gemma. (2018). Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*. 25. 14-20. 10.7748/nr.2018.e1466.
- Salancik, G. R., & Meindl, J. R. (1984). Corporate attributions as strategic illusions of management control. *Administrative Science Quarterly*, 29(2), 238–254. <https://doi.org/10.2307/2393176>
- Saunders, Mark & Lewis, Philip & Thornhill, Adrian & Bristow, Alex. (2019). "Research Methods for Business Students" Chapter 4: Understanding research philosophy and approaches to theory development.
- Schutt, Russell. (2015). *Investigating the Social World: The Process and Practice of Research*.
- Selvam, Murugesan & J., Gayathri & Vinayagamoorthi, Vasanth & Kasilingam, Lingaraja & Sigo, Marxia. (2016). Determinants of Firm Performance: A Subjective Model. *International Journal of Social Science Studies*. 4. 10.11114/ijsss.v4i7.1662.
- Sekaran, Uma. (2003). *Research methods for business : a skill business approach*.
- Shettima, Usman & Dzulqarnaini, Nazam. (2018). Board characteristics and microfinance institutions' performance: Panel data evidence from Nigeria. *Journal of Accounting in Emerging Economies*. 8. 10.1108/JAEE-01-2017-0006.
- Sheikh, Dr. Nadeem & Karim, Sitara. (2015). Effects of internal governance indicators on performance of commercial banks in Pakistan. *Pakistan Journal of Social Sciences*. 35. 77-90.
- Srinidhi, Bin & GUL, FERDINAND & Tsui, Judy. (2011). Female Directors and Earnings Quality*. *Contemporary Accounting Research*. 28. 1610 - 1644. 10.1111/j.1911-3846.2011.01071.x.
- Smirnova, Aleksandra & Oskolkova, Marina. (2017). Which came first, CEO compensation or firm performance? The causality dilemma in European companies. *Research in International Business and Finance*. 42. 10.1016/j.ribaf.2017.07.009.
- Spence, M. (2002). Signaling in Retrospect and the Informational Structure of Markets. *American Economic Review*, 92(3), 434–459. <https://doi.org/10.1257/00028280260136200>
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355. <https://doi.org/10.2307/1882010>
- Stiglitz, J. E. (2000). The Contributions of the Economics of Information to Twentieth Century Economics. *The Quarterly Journal of Economics*, 115(4), 1441–1478. <https://doi.org/10.1162/003355300555015>
- The Malaysian Reserve (2021, March 23). *UPDATED: Banks' top execs see higher pay in . . .* The Malaysian Reserve. <https://themalaysianreserve.com/2021/03/23/banks-top-execs-see-higher-pay-in-fy20/>
- The Star Online (2019, May 6). Five GLCs among 20 listed firms with highest-paid CEOs. The Star Online. <https://www.thestar.com.my/business/business-news/2019/05/07/five-glcs-among-20-listed-firms-with-highestpaid-ceos/>
- Tosi, H. L., & Gomez-Mejia, L. R. (1989). The Decoupling of CEO Pay and Performance: An Agency Theory Perspective. *Administrative Science Quarterly*, 34(2), 169. <https://doi.org/10.2307/2989894>

- Usman - Taunsvi, Muhammad & Zhang, Junrui & Wang, Fangjun & Junqin, Sun & Makki, Abdul Majid. (2018). Gender diversity in compensation committees and CEO pay: evidence from China. *Management Decision*, 56. 10.1108/MD-09-2017-0815.
- Usman - Taunsvi, Muhammad & Umar Farooq, Muhammad & Zhang, Junrui & Dong, Nanyan & Makki, Abdul Majid. (2018). Women on Boards and CEO Pay-Performance Link. *International Journal of Manpower*. ahead-of-print. 10.1108/IJM-04-2017-0056.
- Vafeas, N. (2003). Further Evidence on Compensation Committee Composition as a Determinant of CEO Compensation. *Financial Management*, 32(2), 53. <https://doi.org/10.2307/3666336>
- Veen, K., & Rafael, W. (2016). Relational Signalling and the Rise of CEO Compensation: “. . . It is Not Just About Money, It is About What the Money Says. . . .” *Long Range Planning*, 477–490. <https://doi.org/10.1016/j.lrp.2015.12.009>
- Weber, Libby & Wiersema, Margarethe. (2017). Dismissing a Tarnished CEO? Psychological Mechanisms and Unconscious Biases in the Board’s Evaluation. *California Management Review*, 59. 000812561771225. 10.1177/0008125617712257.
- Westphal, J., & Zajac, E. (1995). Who Shall Govern? CEO/Board Power, Demographic Similarity, and New Director Selection. *Administrative Science Quarterly*, 40(1), 60-83. doi:10.2307/2393700
- Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics*, 20, 431–460. [https://doi.org/10.1016/0304-405X\(88\)90053-0](https://doi.org/10.1016/0304-405X(88)90053-0).
- Ya’acob, Nur. (2016). CEO Duality and Compensation in the Market for Corporate Control: Evidence from Malaysia. *Procedia Economics and Finance*, 35. 309-318. 10.1016/S2212-5671(16)00039-3.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40(2), 185–211. [https://doi.org/10.1016/0304-405x\(95\)00844-5](https://doi.org/10.1016/0304-405x(95)00844-5)
- Zucman, G. (2019). Global Wealth Inequality. *Annual Review of Economics*, 109–134. <https://doi.org/10.3386/w25462>
- Zizlavsky, O. (2015). Approaches to Innovation Process Assessment: Complex Results from an Exploratory Investigation. *International Journal of Engineering Business Management*, 7, 25. <https://doi.org/10.5772/6205>