

CHAPTER 5

DATA ANALYSIS AND FINDINGS

5.1 Introduction

This chapter presents the findings of this study. The first section 5.1 discusses the content of this chapter. This is followed by section 5.2 the descriptive information of the variables. This information includes financial performance, board of director effectiveness (BODE), audit committee effectiveness (ACE), Shariah committee quality (SCQ), and the control variables. In section 5.3 elaborate the panel data is discussed. The section 5.4 of this chapter examines the assumption of regression analysis. These include missing values, outliers, normality, multicollinearity, autocorrelation, and heteroscedasticity. In the section 5.5 deals with the choice between random effect model and fixed effects model is discussed. The section 5.6 discusses the hypotheses testing of this study. The section 5.7 summarizes the findings of this study, and the last section summary of this chapter.

5.2 Descriptive Information of the Variables

This section presents descriptive information on the variables of this study. The performance, BODE, ACE, SCQ and the control variables are presented in this section. The mean, median, standard deviation (Std. Deviation), minimum and maximum values are given in the following sections.

5.2.1 Descriptive information of Firm performance

Table 5.1 presents descriptive information about the financial performance of Malaysian Takaful companies. The performance is operationalized to include market-based performance and accounting-based performance. The accounting-based performance included ROA and ROE. The table shows that the minimum value of ROA was -0.182 while the maximum value was 0.073, indicating that differences were present in the ROA of the companies. The mean of -0.0068 and standard deviation indicated that the performance in terms of ROA for all companies was homogeneous. In terms of the ROE, the values ranged from -0.386 to 0.26, indicating a bigger gap in the ROE than ROA. However, the mean was positive at 0.013 and the std. deviation was larger, with a value of 0.151.

The EPS values ranged between -0.43 as the minimum value and 1.39 as the maximum value for the market-based performance. The mean was 0.183, indicating that the companies earned 18.3 cents for every share on average, as shown in Table 5.1.

Table 5.1: Descriptive Information of the Financial Performance of Takaful Companies in Malaysia

		ROA	ROE	EPS
N	Company	11	11	11
	Years	8	8	8
	Observations	88	88	88
	Missing	0	0	0
	Mean	-0.0068	0.013	0.183
	Median	0.004	0.031	0.069
	Std. Deviation	0.044	0.151	0.355
	Minimum	-0.182	-0.386	-0.43
	Maximum	0.009	0.26	1.39

5.2.2 Descriptive information of the Board of Directors

The descriptive information of the board of director effectiveness is given in Table 5.2. The board director effectiveness includes board size, board independence, executive member, Muslim director, meeting frequency and board gender diversity. Board size ranged between 5 and 9 members with a mean of 7.02. This result is consistent with previous studies in Malaysia, such as (Alkdai & Hanifa, 2012; Adaa & Hanefah, 2018), who found an average board size of 7.5 directors in Malaysian Shariah-compliant companies. Board independence ranged between 0.282 as a minimum and 0.841 as a maximum with a mean of 0.501, indicating that almost 53% of the board were independent. This result was consistent with Haniffa and Hudaib (2006) in Malaysia who found a mean of 50% for independent directors. Executive members on the board had a minimum of zero and a maximum of 0.33 with a mean of 0.083. This result agrees with Adaa (2019), who found an average of 8% for board executive members.

For the Muslim director in the board, Table 5.2 shows that the minimum was 0.29 while the maximum was 1, indicating that between 28.2% to 100% of the companies employed Muslim directors. However, the mean of 0.635 indicates that about 63.5% of the board members were Muslim. This result was greater than the value reported in Hassan and Marimuthu (2018), who found that Muslim diversity was 30% and Abd-Mutalib (2017) who found that Muslim diversity was 37%. The differences in the percentage could be related to the fact that Malaysian Takaful companies are Islamic companies, and the majority of board members and customers are Muslims.

Board meeting shows that the board met at least three times yearly while the maximum number of yearly meetings was 17. On average, the board met almost seven

times a year. However, the Std. deviation was high at 1.906. The findings of the current study are consistent with Abdulsamad et al. (2018) and Noor and Fadzil (2013) who found that mean of board meetings in Malaysia was around 6 yearly.

Board gender diversity is presented in Table 5.2. The minimum score was zero, with a maximum of 0.39 and a mean of 0.093, indicating that the average number of females serving was 9.3%. Other researchers in the context of Malaysian companies found that the female percentage on the board ranged between 8.2% and 50% (Ahmad et al., 2018) or 53% of the board are females (Lee-Kuen et al., 2017). In comparison, females in Takaful companies in Malaysia comprised 43%.

Table 5.2 shows the composite measure of the board of directors' effectiveness (BODE) is shown in Table 5.2. The mean of the board of directors' composite measure was 0.413, and the median was 0.50. The standard deviation was 0.241, while the minimum value was 0, and the maximum value was 0.82. This finding aligns with Shatnawi (2020), who found that a composite measure of the BOD ranged between 0 and 5 with a mean score of 2.2.

Table 5.2: Descriptive Information of the Board of Director

		Board Size	Board Independence	Executive Member	Muslim Director	Board Meeting	Board Gender Diversity	BDE Effectiveness
N	Company	11	11	11	11	11	11	11
	Years	8	8	8	8	8	8	8
	Observation	88	88	88	88	88	88	88
	Missing	0	0	0	0	0	0	0
	Mean	7.020	0.501	0.083	0.635	7.312	0.093	0.413
	Median	7.000	0.533	0.102	0.562	7.000	0.139	0.500
	Std. Deviation	1.131	0.109	0.088	0.209	1.906	0.101	0.241
	Minimum	5.00	0.282	0.000	0.282	3.00	0.00	0.00
	Maximum	9.00	0.841	0.319	1.00	17.00	0.39	0.82

5.2.3 Descriptive Information of Audit Committee

Table 5.3 shows the descriptive information for the audit committee. The audit committee information includes the chairman specialization, AC size, AC

independence, AC meeting, and AC effectiveness. **The chairman specialization** value ranged between 0 and 1 because the value was calculated as a percentage. The mean score was 0.771, indicating that 77.1% of the companies had a chairman specialising in accounting.

Table 5.3 shows that the minimum number of members was 3 for the **AC size** while the maximum was 6. The mean score was 3.314, and the median was 3, indicating that there were at least 3 members on the AC. This number follows the international recommendation for a committee at least three members, and these findings are consistent with recommendations of the MCCG. The findings of the current study also aligned with other research. Apadore and Noor (2013) found a mean of 3.28 for the ACS and maximum of 7, and Al-mamun et al., (2014) found a mean of 3.34 for ACS and a maximum of 5.

Table 5.3 shows that the minimum percentage of **independence in the AC** was 60% for AC independence while the maximum was 100%. The mean score was 0.802, indicating that 80.2% of the AC members were independent. Previous studies such as Apadore & Noor (2013) indicated that the mean percentage of AC independent was 86.1%), and the minimum and maximum ranged between 40% and 100%.

The AC meeting metric indicates that the minimum number of yearly meetings was 3, while the maximum number was 10. The mean was 5.536, and the median was 5, indicating that on average, the AC meets about five times yearly. This indicates that all the audit committee in the Takaful companies discharge their responsibility and fulfil their duties appropriately. This result is similar to Madi's et al., (2014) findings, which revealed a mean audit committee meeting frequency of 5 times yearly. This

finding was also constant with Wam Mohammad (2018), who found a mean meeting frequency in Malaysian listed companies 4.9 times yearly.

The ACE is a percentage and is shown in Table 5.3. The minimum value was 0, while the maximum value was 1. The mean score was 0.502, indicating that the effectiveness of the AC was medium. Table 5.3 shows the descriptive information of the AC.

Table 5.3: Descriptive Information of the Audit Committee

		Chairman n Specialization	AC Size	AC Independence	AC Meeting	AC Effectiveness
N	Company	11	11	11	11	11
	Years	8	8	8	8	8
	Observation	88	88	88	88	88
n	Missing	0	0	0	0	0
	Mean	0.771	3.314	0.802	5.536	0.502
	Median	1.000	3.000	0.75	5.000	0.500
	Std. Deviation	0.403	0.761	0.151	1.671	0.243
	Minimum	0.00	3.00	0.60	3.00	0.00
	Maximum	1.00	6.00	1.00	10.00	1.00

5.2.4 Descriptive information of Shariah Committee Quality

Table 5.4 shows the descriptive information of the Shariah committee quality (SCQ). It is shown as a percentage. The minimum value was 0.48, while the maximum value was 1.00. The mean score is (0.881) indicating that the quality of the SCQ is high at 88.1%. This result is consistent with Ajili and Bouri's (2018) findings, who found a percentage mean of the SCQ index of 86% and a maximum of .05 and 1, respectively.

Table 5.4: Descriptive Information of SCQ

SCQ		
N	Company	11
	Years	8
	Observation	88
	Missing	0
Mean		0.881
Median		0.811
Std. Deviation		0.101
Minimum		0.48
Maximum		1.00

5.2.5 Descriptive Information of the Control Variables

This study deployed firm size, firm age and, leverage rate as control variables. The descriptive information of these variables is given in Table 5.5. Values are given in Ringgit Malaysian (RM).

Table 5.5 shows the descriptive information of the control variables. The table shows that the Takaful companies' firm size in Malaysia, measured by the total assets, ranged between RM 91,219,242 to RM 16,132,314,102. The mean score was RM 2,123,134,201.319. The Std. deviation was 3,234,143,314.131, indicating an enormous variation in company size over the ten years studied.

For the firm age, the minimum value was 1 year while the maximum value was 32 years. The mean score was 9.713, with a median of 10, indicating that the companies' mean age was around 9.713 years.

The leverage rate is also presented in Table 5.5. It shows that the minimum leverage rate reached 0.05 while the maximum level reached 1.27. The mean was 0.613, indicating that the assets of the companies covered 61.3% of the liabilities. The std. deviation was 0.191, indicating a minor variation in the leverage percentage among the companies.

As it is show there are big gap between the capital of Malaysian Takaful operators it maybe explanation, the difference age 32 years, that mean the old companies have accumulated profit and trust of investor and good reputation, the biggest company Syarikat Takaful listed in bursa Malaysia it required huge capital to meet the listed requirements, the market share of some companies increased depends on the performance, some of companies well organized and have high reputation boards and shariah committees.

Table 5.5: Descriptive Information of Control Variables

		Firm Size	Firm Age	Leverage Rate
N	Company	11	11	11
	Years	8	8	8
	Observatio	88	88	88
n	Missing	0	0	0
Mean		2,123,134,201.319	9.713	0.613
Median		1,071,081,239.000	10.000	0.798
Std. Deviation		3,234,143,314.131	6.128	0.191
Minimum		91,219,242.00	1.00	0.05
Maximum		16,132,314,102.00	32.00	1.27

5.3 Declaration of Panel Data

Using software such as STATA, version 16.0, a need exists to declare the data as panel data to enable the software to deal with the data effectively. Thus, this study has declared a period of T=8 and the number of companies as N=11. Accordingly, the number of observations was calculated as 88 ($N=11*T=8$). Missing values were treated according to Hair, Hult, Ringle, and Sarstedt (2017) recommendation. They said if the missing values of observations were less than 15%, researchers were permitted to replace the missing value with the mean value. However, if more than 15% of the observations were missing, the observation should be removed from the

dataset. In this study, the few missing values were replaced by the mean value. This resulted in a strongly balanced data. The next section discusses the assumptions of regression analysis.

5.4 Assumptions of Regression Analysis

This study used regression analysis to examine the hypotheses. However, before proceeding with the analysis, assumptions about the data's goodness and suitability must be examined. Researchers such as Hair et al. (2017) suggested checking for outliers, normality, multicollinearity, autocorrelation, and heteroscedasticity. Researchers have always checked for autocorrelation and heteroscedasticity when using the secondary data approach (Pallant, 2016). Therefore, in this study, the outliers, normality, multicollinearity, autocorrelation, and heteroscedasticity were examined.

5.4.1 Outliers

Researchers indicate that outlier values are large or small values that are far from the mean or the central tendency (Hair et al., 2017). For examining the outliers, there is a need to check the boxplot of the variables. In this study, all the boxplots were checked, which found firm size, firm age, board meeting had outliers. Researchers have suggested either to delete the observation with outlier issue or transform the data using the winsorizing method to overcome this issue. In this method, extreme values should be replaced with the closest value that is not considered an outlier (Henry & Sansing, 2014; Rivest, 1994; Yu-Jun, 2014; Zhang, 2017). After winsorizing the data, the outliers were solved. Boxplots of all the variables are given in Appendix 2. It shows that the data were free from outlier issues.

5.4.2 Normality of the Data

Traditionally, the use of skewness and kurtosis as indicators of the normality is widely spread among researchers. Pallant (2016) said that the accepted values of skewness and kurtosis of less than absolute 2 were acceptable to conclude that the data were normally distributed.

The normality of the data was examined, and it was found that some values exceeded the acceptable value of 2, indicating that the data violated normal distribution. Researchers suggested transforming the data to resolve this issue. Among the suggested methods are the Blom, Tukey, Van der Waerden and Rankit approaches. Researchers have compared the methods for accuracy and found that Van der Waerden is better than all methods (Lüpsen, 2018; Sheskin, 2007). Van der Waerden is more accurate in showing the variance, and accordingly, this method was used to transform the data.

After transforming the data, the value of skewness and kurtosis were examined. Table 5.6 shows that less than two kurtosis values and skewness values were also less than 2, indicating that the data were normally distributed.

Table 5.6: Results of Normality Analysis

Variable	Skewness <2	Kurtosis <2
Board size	0.203	-0.411
Board Independence	0.398	0.415
Executive member	0.609	-0.633
Muslim Director	0.561	-0.768
Board Meeting Frequency	0.059	-1.449
Board Gender Diversity	-0.076	-1.502
BOD Effectiveness	-0.069	-0.792
Chairman Specialization	-1.414	0.298
AC size	1.213	-0.531
AC independence	0.150	1.731

AC meeting	0.581	-0.665
AC Effectiveness	-0.013	-0.673
SCQ	-0.945	1.434
ROA	-0.349	0.310
ROE	-0.591	-0.214
EPS	0.784	1.134
Firm Size	1.344	0.683
Leverage	-1.142	0.594
Firm age	1.213	0.995

N=11, Years =8, Observation=88

In STATA, normality can also be checked using the residual of the dependent variables. In this study, there are three dependent variables, namely, ROA, ROE, and EPS. The residuals of the three dependent variables were created to check for normal distribution. Figure 5.1 shows the residual of ROA. The figure shows a bell-shaped curve, which is an indication that the histogram of ROA is showing a normal distribution.

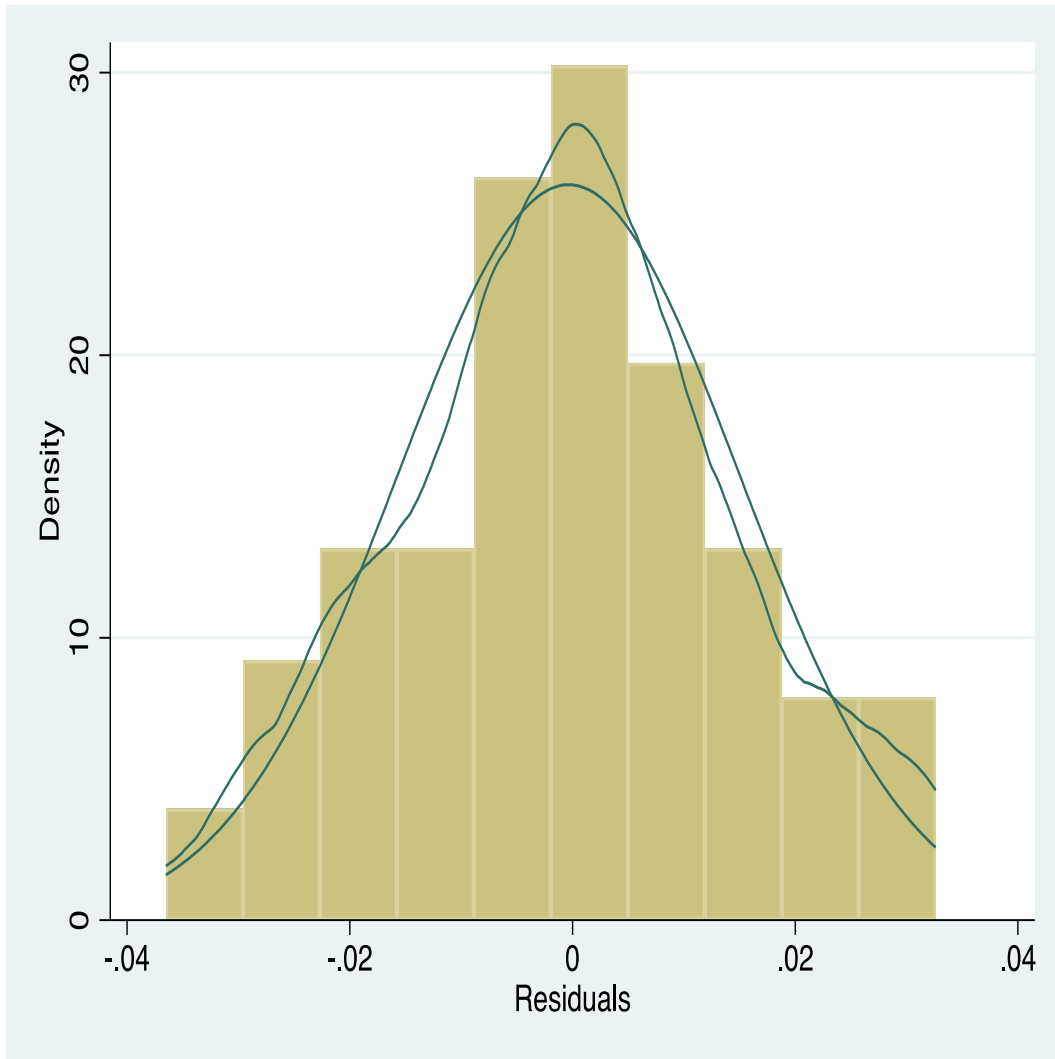


Figure 5.1: Residual of Normality of Return on Assist

Figure 5.2 also shows that the ROE histogram had a normal distribution shape, indicating that the data were normally distributed.

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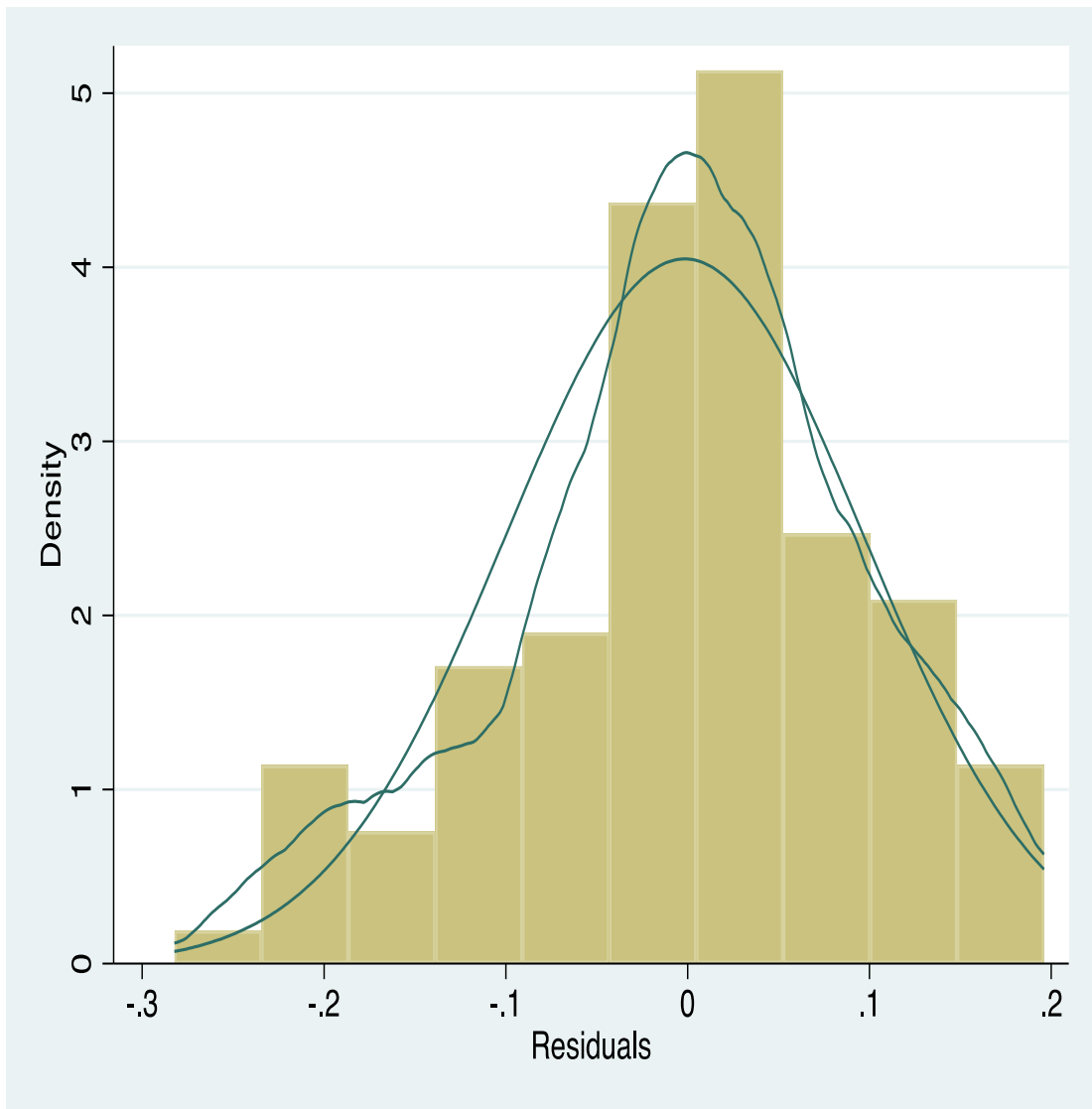


Figure 5.2: Residuals of Normality of Return on Equity

For the third dependent variable, EPS, the histogram is given in Figure 5.3. It shows that the data in term of EPS was normally distributed.

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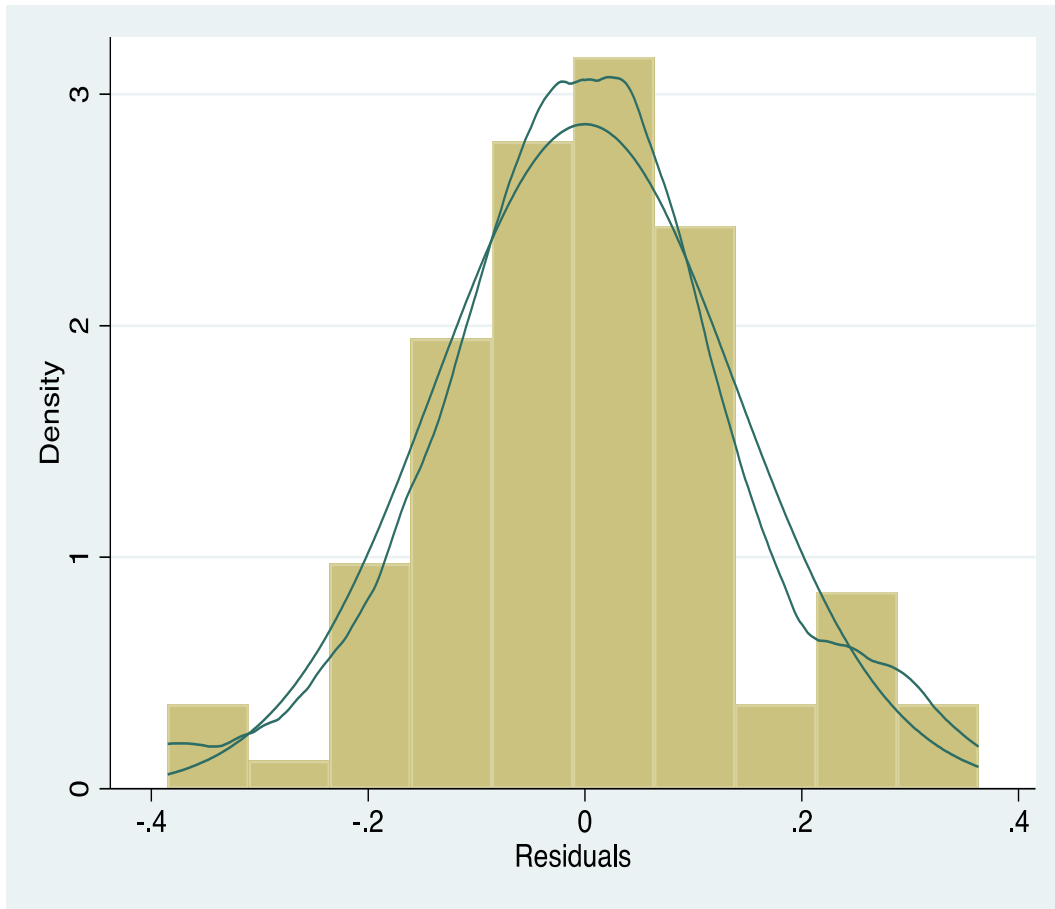


Figure 5.3: Residuals of Normality of the Earning Per Share

Overall, the conclusion can be reached that the data were normally distributed based on the values of skewness and kurtosis and also based on the histograms of the residuals.

5.4.3 Multicollinearity

Researchers suggested examining the multicollinearity, which refers to high correlation among the independent variables (Hair et al., 2017). Multicollinearity can be checked using several methods. Researchers have suggested using the variation inflation factor (VIF) and Tolerance ($1/VIF$) to check if the data has a multicollinearity issue. A value of VIF greater than 10 or a tolerance less than 0.10 indicates that the data have a multicollinearity issue. A multi-regression analysis was

used to check for collinearity. The dependent variable was assigned as ROA. Other dependent variables, including ROE and EPS, were included in the equation. Table 5.7 shows the results of the multicollinearity analysis. It shows that the value of VIF was less than 10, and the tolerance was greater than 0.10.

Table 5.7: Multicollinearity Analysis

Variable	VIF<10		Tolerance (1/VIF) >0.10	
	Model 1	Model2	Model 1	Model 2
EPS	4.435	2.733	0.210	0.331
ROE	4.031	2.994	0.231	0.335
Board Size	1.634		0.534	
Muslim director	2.512		0.344	
Board Gender diversity	2.311		0.412	
Board Independence	2.311		0.441	
Board meeting	1.413		0.631	
Executive member	1.515		0.612	
BOD effectiveness		2.144		0.319
AC Size	1.612		0.512	
AC independence	1.341		0.644	
AC Meeting	1.313		0.715	
AC Chairman Specialization	1.191		0.811	
AC effectiveness		2.551		0.377
SCQ	1.312		0.522	
Firm age	3.414	1.531	0.244	0.622
leverage	2.921	1.441	0.491	0.612
Firm Size	1.812	1.912	0.521	0.906

Dependent variable: ROA

5.4.4 Correlation Matrix

Hair et al. (2010) also suggested that a correlation between the variables exceeding 0.90 is an indication that there is multicollinearity. The correlation among the variables is given in Table 5.8. It shows that correlation among the variables. It can be seen that the highest correlation is between the dependent variables ROE and EPS was 0.567, followed by the correlation between ROA and ROE at 0.511. Other correlations between the variables were less than 0.567. All the correlations between the variables were less than 0.90, confirming that collinearity was not an issue in this study.

Table 5.8: Matrix of Correlation Among the Variables

	BS	BIND	EM	MD	BMF	GD	ACCS	ACS	ACIND	ACMF	ROA	ROE	EPS	FSIZE	LR	FAGE
BS	1															
BIND	-0.212*	1														
EM	-0.033	0.212**	1													
MD	0.134	0.311**	-0.08	1												
BMF	0.089	0.218**	-0.154	0.370**	1											
GD	-0.241*	-0.053	0.017	0.141	0.054	1										
ACCS	-0.053	-0.041	0.032	0.209*	0.093	0.351**	1									
ACS	0.231**	0.287**	-0.077	0.477**	0.334**	-0.315*	-0.133	1								
ACIND	-0.045	0.113	0.119	-0.143	0.184	0.231*	0.143	-0.033	1							
ACMF	0.041	0.164	0.015	0.102	0.331**	0.043	-0.141	0.143	0.1	1						
ROA	0.008	-0.163	-0.026	0.315**	0.034	0.143	0.165*	-0.044	-0.054	0.048	1					
ROE	0.049	-0.133	0.005	0.419**	0.065	0.154	0.154	-0.043	-0.043	0.013	0.567**	1				
EPS	0.049	-0.182*	0.037	0.222*	-0.052	-0.031	0.044	-0.124	-0.231*	0.032	0.436**	0.511**	1			
FSIZE	-0.091	0.081	0.234*	-0.036	-0.233**	0.035	-0.049	-0.134	0.133*	-0.35	0.335**	0.141	0.183	1		
LR	-0.042	0.044	-0.001	0.120	0.044	0.034	-0.044	-0.131	0.043	0.242*	0.316*	0.142	0.041	0.114	1	
FAGE	0.133	0.145	-0.036	.265**	0.131	0.043	0.051	-0.043	-0.143	0.231**	0.424**	0.439**	0.491**	0.141	0.139	1

*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

Note: BS: board size, BIND: Board Independence, EM: executive member, MD: Muslim directors, BMF: Board meeting frequency, GD: board gender diversity, ACCS: Audit committee chairman specialization, ACS: Audit committee size, ACI: Audit committee independence, ACMF: Audit committee meeting frequency, ROA: Return on assets, ROE: return on equity, EPS: earning per share, FSIZE: Firm size, LR: leverage, FAGE: Firm age.

For the correlation among the composite variables such as the BODE, ACE, and the control variable and the dependent variable Table 5.9 shows that the correlation was within the accepted range of less than 0.90.

Table 5.9: Correlation among Composite Variables and Financial Performance

	BODE	ACE	ROA	ROE	EPS	FS	LEV	FA
BODE	1							
ACE	0.345	1						
ROA	0.231	0.034	1					
ROE	0.110	-0.012	0.557	1				
EPS	-0.045	-0.154	0.409	0.541	1			
FS	0.189	0.026	0.345	0.431	0.121	1		
LR	0.231	0.134	0.513	0.343	0.133	0.343	1	
FA	0.431	0.134	0.541	0.610	0.414	0.243	0.419	1

Note: BODE: Board director effectiveness, ACE: Audit committee effectiveness, ROA: Return on assets, ROE: Return on equity, EPS: Earning per share, FS: Firm size, LR: leverage, FA: Firm age.

5.4.5 Heteroscedasticity

Heteroscedasticity occurs when the variance is not constant. One of the widely used methods to test the heteroscedasticity issue is the Breusch-Pagan/ Cook-Weisberg test. A null hypothesis is proposing that there is constant variance in the data. The Null hypothesis is accepted if the Prob>chi2 is greater than 0.05 and rejected if the Prob>chi2 is less than 0.05. Table 5.10 presents the results of testing the heteroscedasticity. The heteroscedasticity was tested using the three dependent variables. The table shows that the Prob>chi2 was greater than 0.05 for all dependent variables indicating that the null hypothesis is accepted. This confirms that there is no issue of heteroscedasticity in the data of this study.

Table 5.10: Heteroscedasticity
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance		
Variables: fitted values of Log ROA	chi2(1)	2.090
	Prob > chi2	0.141
Variables: fitted values of Log ROE	chi2(1)	0.641
	Prob > chi2	0.399
Variables: fitted values of Log EPS	chi2(1)	0.871
	Prob > chi2	0.319

5.4.6 Autocorrelation

Autocorrelation or serial correlation occurs in financial data because they have similar readings, especially when it comes to assets, ROA, and ROE. To overcome this issue, researchers suggested lagging the error term by T-1 (Fahrmeir et al., 2013). Breusch Godfrey LM is a common method for testing autocorrelation (Hun, 2011; Anderson et al., 2016). This method proposes a null hypothesis, as shown in Table 5.11 “H0: no serial correlation.” The method was used for the three dependent variables, and the conclusion was reached that no autocorrelation existed because the Prob>chi2 was greater than 0.05. Thus, the null hypothesis is accepted for ROA, ROE, and EPS. Thus, this leads to the conclusion that autocorrelation was not an issue in this study's data.

Table 5.11: Autocorrelation

DV	Lags(p)	Chi2	Df	Prob>chi2	Conclusion
ROA	1	2.205	1	0.141	H0: accepted
ROE	1	2.199	1	0.134	H0: accepted
EPS	1	3.099	1	0.301	H0: accepted
H0: no serial correlation					

5.4.7 Random effect model vs. fixed effect model

Before testing the hypotheses, researchers must determine the suitability of the chosen model for hypotheses testing. There are the random-effects model and the fixed-effects model. To choose one of the models, the Hausman test must be conducted. First, a regression analysis was conducted using the random-effects model; then, the results were stored. Next, the regression analysis was conducted using the fixed-effect model, and the results were also stored. After that, the Hausman test was used to determine the appropriate model.

To do this, two hypotheses are developed. First, the null hypothesis: “H0: random effect model is appropriate for the panel data” while the alternative hypothesis is stated “Ha: fixed effect model is appropriate for the panel data.” The results of the Hausman test are given in Table 5.12. It shows the Prob>chi2 was less than 0.05, indicating that the null hypotheses are rejected, and the alternative hypothesis is accepted. Accordingly, the hypotheses of this study will be tested using the fixed effect model.

Table 5.12: Result of the Hausman Test

Dependent variable	Chi2 (7)	Prob>chi2	Conclusion
Return on Assets	118.13	0.0000	Fixed effect model is appropriate
Return on Equity	110.89	0.0000	Fixed effect model is appropriate
Earnings Per Share	52.34	0.0000	Fixed effect model is appropriate

5.5 Result of hypotheses Testing

The hypotheses of this study were tested using STATA. The fixed-effects model was used in testing all the hypotheses. The rule of thumb is to accept the hypothesis if the t-value (t) is greater than 1.65 at significance level (P-value or P) less than 0.1 and accept the hypotheses if the t-value is greater than 1.96 at P-value level of less than 0.05 and accepting the hypothesis if the t-value is 2.58 with P-value less than 0.001. In this study, all the significance levels were considered because the number of observations was considered small. This is in line with the suggestion of Hair et al. (2017).

5.6 Direct Effect Hypotheses

The direct effect hypotheses of this study include the effect of BOD and its sub-variables and the effect of AC and its sub-variables on the financial performance of Takaful companies in Malaysia. There are 12 direct hypotheses. Seven of the hypotheses are related to the BODE, while the remaining five are related to the ACE.

It is worthwhile to mention that the BOD effectiveness (BODE_score) and AC effectiveness (ACE_score) were tested alone but combined for a better presentation of the result.

The first dependent variable of this study is the ROA. Table 5.13 shows the results of the hypotheses with ROA as the dependent variable. Model 1 was statistically significant with Prob>F accounts to 0.000 and F=24.19. The r-square of the model was 0.73, indicating that the variables can explain 73% of the variation in the ROA. For model 2, it is also statistically significant with Prob>f equal to 0.000 and F=34.91. The r-square, as shown in Table 5.13, was 0.54, indicating that the composite variables can explain 54% of the variation in ROA.

Table 5.13: Results of Direct Effect Hypotheses on ROA as Dependent Variable

H	Return on Assets	Model 1			Model 2		
		Coef. (B)	t	P>t	Coef. (B)	t	P>t
	Constant	0.719***	4.24	0.000***	0.700***	4.08	0.000***
H1	Board Size	0.003	0.63	0.531			
H2	BOD independence	0.064**	3.31	0.002**			
H3	Executive membership	0.006	0.47	0.671			
H4	Muslim directors	0.387***	5.34	0.000***			
H5	BOD meeting frequency	-0.015**	-2.01	0.043**			
H6	Gender diversity	0.189**	3.39	0.001**			
H7	BOD Effectiveness (BDE_score)				0.241***	3.79	0.000***
H8	AC Chairman Specialization	0.046	1.33	0.159			
H9	AC Size	0.139**	2.13	0.037**			
H10	AC independence	0.179**	2.54	0.009**			
H11	AC Meeting frequency	0.004	0.89	0.391			
H12	AC Effectiveness (ACE_score)				0.271***	4.76	0.000***
	Firm Size	-0.003	-0.04	0.919	0.004	0.641	0.514
	Leverage	0.441**	2.99	0.003**	0.591**	3.16	0.001
	Firm age	-0.005	-1.53	0.134	-0.019**	-2.43	0.029
	F (13, 86)	24.19			34.91		
	Prob>F (P-value)	0.000			0.000		
	R-squared	0.73			0.54		

Note: *, **, *** indicates significance at the 10%, 5%, 1%, levels

For the effect on Return on Equity (ROE), the findings in Table 5.14 present the results of testing the hypotheses with ROE as a dependent variable. Model 1 was

significant (Prof>F=0.000) with an r-square of 0.531, indicating that the variables can explain 53.1% of the variation in the ROE. Similarly, Model 2 was also significant and can explain 44.5% of the variation in the ROE of Takaful companies in Malaysia.

Table 5.14: Results of Testing the Hypotheses with ROE as a Dependent Variable

		Model 1			Model 2		
	Return on Equity	Coef.	T	P>t	Coef.	t	P>t
	Constant	0.559**	3.19	0.006**	0.192**	3.99	0.000**
H1	Board Size	0.003	0.42	0.519			
H2	BOD independence	0.002	0.06	0.807			
H3	Executive membership	0.318***	6.01	0.000***			
H4	Muslim directors	0.491***	6.42	0.000***			
H5	BOD meeting frequency	-0.021**	-2.09	0.033**			
H6	Gender diversity	0.197**	3.34	0.003**			
H7	BOD Effectiveness (BDE_score)				0.366***	5.19	0.000***
H8	AC Chairman Specialization	0.065*	1.89	0.061*			
H9	AC Size	0.044*	2.33	0.02*			
H10	AC independence	0.213**	3.19	0.002**			
H11	AC Meeting frequency	0.005	0.34	0.731			
H12	AC Effectiveness (ACE_score)				0.193**	2.91	0.003**
	Firm Size	0.004	1.28	0.189	0.005	1.33	0.210
	Leverage	-0.047	-0.29	0.731	-0.003	-0.02	0.943
	Firm age	-0.009	-2.19	0.019**	-0.019	-2.91	0.002
	F (13, 86)	24.12			23.99		
	Prob>F (P-value)	0.000			0.000		
	R-squared	0.531			0.445		

Note: *, **, *** indicates significance at the 10%, 5%, 1%, levels.

Table 5.15 presents the results of testing the hypotheses with EPS as a dependent variable. The table shows that model 1 was statistically significant with a Prof>F value of 0.000 and an R-square value of 0.735. This implies that the variables of this study can explain 73.5% of the variation in EPS. For Model 2, the model was also significant with F=20.87 and R-square of 0.541, indicating that 54.1% of the EPS can be explained by BOD effectiveness and AC effectiveness.

Table 5.15: Results of Testing the Hypotheses with EPS as Dependent Variable

EPS	Model 1			Model 2		
	Coef.	T	P>t	Coef.	t	P>t
Constant	0.991**	2.03	0.041**	0.912**	2.41	0.034**
H1 Board Size	0.031**	2.49	0.004**			
H2 BOD independence	0.232***	3.78	0.000***			
H3 Executive membership	-0.396**	-2.41	0.019**			
H4 Muslim directors	0.541**	2.31	0.009**			
H5 BOD meeting frequency	-0.004	-0.24	0.614			
H6 Gender diversity	0.377**	2.19	0.031**			
H7 BOD Effectiveness (BDE_score)				0.941***	3.44	0.000***
H8 AC Chairman Specialization	0.113	1.34	0.219			
H9 AC Size	0.131*	1.98	0.048**			
H10 AC independence	0.212	0.93	0.413			
H11 AC Meeting frequency	-0.042	-1.44	0.139			
H12 AC Effectiveness (ACE_score)				0.709**	3.49	0.000***
Firm Size	0.004	0.24	0.897	0.014	0.42	0.348
Leverage	0.139	0.27	0.415	0.151	0.29	0.782
Firm age	-0.003	-0.03	0.910	-0.024	-1.47	0.201
F (13, 86)	23.96			20.87		
Prob>F (P-value)	0.000			0.000		
R-squared	0.735			0.541		

*, **, *** indicates significance at the 10%, 5%, and 1% levels

5.6.1 Effect of Board of Directs on the Financial Performance

BOD includes six sub-variables: board size, board independence, executive membership, Muslim director, board meeting frequency, and gender diversity. To simply the hypotheses testing and the presentation of the result, Table 5.16 summarizes the effect of the BODE on the three dependent variables of this study.

Table 5.16: Results of the Direct Effect of BOD on Financial Performance

H	Independent Variables	Coefficient		
		ROA	ROE	EPS
	Constant	0.719***	0.559**	0.991**
H1	Board Size	0.003	0.003	0.031**
H2	BOD independence	0.064**	0.002	0.232***
H3	Executive membership	0.006	0.318***	-0.396**
H4	Muslim directors	0.387***	0.491***	0.541**
H5	BOD meeting frequency	-0.015**	-0.021**	-0.004
H6	Gender diversity	0.189**	0.197**	0.377**
H7	BOD Effectiveness (BODE_score)	0.241***	0.366***	0.941***

*, **, *** indicates significance at the 10%, 5%, and 1% levels

5.6.1.1 Board Size and Financial Performance

The first hypothesis of this study predicted that the effect of board size on the financial performance of the Takaful companies in Malaysia would be positive “H1: Board size is positively related to the financial performance of Malaysian Takaful Financial companies.” The findings in Table 5.16 show that the effect of board size on ROA was insignificant (Coefficient = 0.003, T = 0.63, P<0.531). Thus, board size did not affect the ROA of Takaful companies in Malaysia. For its effect on ROE, the findings also showed that the effect was insignificant (Coefficient = 0.003, T= 0.42, P<0.519). Board size did not affect the ROE of Takaful companies in Malaysia. For the EPS, the findings showed that the effect was positive and significant (Coefficient = 0.031, T= 2.49, P<0.005) at a level of 0.05.

Thus, the hypothesis regarding the board size was rejected when it comes to the accounting-based performance such as ROA and ROE but was accepted when it comes to the market-based performance such as EPS. Accordingly, an increase or decrease in the number of board members will not affect ROA and ROE, but an increase in the board size will have a positive effect on EPS.

The insignificant effect of board size with accounting-based performance could be related to the fact that a larger sized board might lead to different opinions that can affect the ROA and ROE. However, when it comes to earnings per sharing, board size could indicate to investors that a large board size is important for company share prices.

These findings agree with the Resource Dependence Theory, which suggests that a larger board has a positive relationship with financial performance because it allows for more diversity and specialists from various fields and facilitates high-

quality decision making. A large board also helps create new networks to obtain benefits from external resources (Salim et al., 2016).

In Malaysia, Zain et al.,(2019) found that larger boards were unable to ensure effectiveness in monitoring management and, thus, were not associated with better performance. Mai (2021) Islamic bank in Indonesia revealed board of directors' size shows an insignificant influence on financial performance. Nazli (2010) and Haniffa and Hudaib (2006) reported that the board size was insignificant regarding firm performance. Bhagat and Bolton (2009) and Kajola (2008) found no significant relationship between board size and firm performance. However, Bansal and Sharma (2016) reported that board size and performance were significantly and positively related.

In this study, hypothesis H1, which predicted a positive relationship between board size and firm performance, was supported for the market-based performance measure (EPS) and rejected based on accounting-based performance indicators (ROA and ROE). The positive relationship with the market-based (EPS) metric may be because when the board size is large, this allows for more diversity and specialists from various fields and facilitates high-quality decision making.

5.6.1.2 BOD independence and Financial Performance

The second hypothesis proposed that the relationship between BOD independence and financial performance of Takaful companies would be positive “H2: BOD Independence is positively related to the performance of Malaysian Takaful companies.” The findings shown in Table 5.16 indicate that BOD independence was positively related to the ROA (Coefficient = 0.064, T= 3.31, P<0.05). Thus, BOD independence positively affects the ROA of Takaful companies

in Malaysia. However, in terms of the ROE, the findings showed that the BOD independence had a positive but insignificant effect on ROE (Coefficient = 0.002, T= 0.06, P>0.1). When tested with the EPS, the findings showed a positive association between BOD independence and the EPS of Malaysian Takaful companies (Coefficient = 0.232, T= 3.78, P<0.001). Thus, the conclusion can be made that BOD independence is an essential predictor of ROA and EPS but not ROE. An increase in BOD independence will result in a positive increase in ROA and EPS. The finding for ROE was positive but insignificant.

The findings regarding ROA and EPS align with the tenets of Agency Theory. One reason for the relationship with ROA and EPS is that an increase of the independence board members reduces conflicts of interest and increases the transparency and quality of decision making (Bosse & Phillips, 2016; Fama & Jensen, 1983). Researchers believe that board independence is beneficial for the performance of companies as it increases effectiveness and reduces managerial opportunism (Terjesen et al., 2016; Harford & Maxwell, 2008). Another possible reason is that external or independent directors provide effective machinery for observing management activities, stabilize the different standpoints, avert misuses of authority, and widen the central body's experience underpinning the firm (Fernández-Gago et al., 2016). The positive effect can also be explained because outside independent directors on boards enhanced corporate competitiveness and provided new strategic outlooks for the firms (Abor & Adjasi, 2007).

Other studies align with the findings of this study regarding the relationship between board independence and ROA. For example, Nickmanesh (2013) found a significant and positive relationship between independence members board and ROA in Malaysia. Hasnah (2009) found a positive relationship between board

independence and corporate performance. Alhaji (2012) found that independent directors influenced EPS. The findings of other studies do not align with those of the current study. For example, Joher and Mohd Ali (2005) indicated that independent non-executive directors serving on a board did not provide any significant explanation for firm performance. Using ROE as a metric, Ponnu and Karthigeyan (2010) stated that no strong evidence existed that the recommended principles in MCGG regarding independent directors positively affected corporate performance in Malaysia (Johari et al., 2008; Wan Yusoff & Alhaji, 2012; Hashim & Devi, 2005; Tham & Romuald, 2012). Conversely, Amedi and Mustafa (2020), using data from all Jordanian companies from manufacture sector from 2016 to 2018, found that board of directors' independence had a positive influence on firm performance using ROE.

The insignificant effect of independent directors on firm performance in the current study could be because some independent members had no adequate knowledge of the market changes, the selection of independent board member in some companies was based on political reasons, or merely to satisfy the requirement of the governance code that the board contain at least one-third independent board members (Haniffa & Hudaib, 2006; Amran, 2010).

The mixed results of the current study were consistent with those who argued that board independence did not affect firm performance. Other studies have revealed an inconsistency relationship between independent directors and firm performance (Abor & Adjasi, 2007; Abdul Rahman & Ali, 2006).

Overall, the findings have indicated that a positive relationship existed between board independence and corporate performance of Malaysian Takaful companies. Therefore, H2 of this study is supported in term of account-based performance (ROA)

and market-based performance (EPS) but did not support the accounting-based performance metric (ROE).

5.6.1.3 Executive Membership and Financial Performance

The third hypothesis of this study posited that the effect of executive membership would be positively related to the financial performance of Takaful companies in Malaysia,” H3: Executive membership is positively related to the performance of Malaysian Takaful companies.”

The findings of hypotheses testing, which are presented in Table 5.16, show that the assumption was correct. Executive membership had a positive effect on the ROA of the Takaful companies in Malaysia (Coefficient = 0.006, T = 0.47, P>0.1) and statistically insignificant. The findings regarding ROE indicate that executive membership was positively related to the ROE of the Takaful companies in Malaysia (Coefficient = 0.318, T = 6.01, P<0.001). The result of testing the hypothesis with EPS as a dependent variable also supported the relationship between executive membership and EPS. However, the association between EPS and executive membership was significant and negative (Coefficient = -0.396, T = -2.41, p = 0.019).

The positive effect of executive membership on accounting-based performance (i.e., ROA and ROE) could be because the increase in the executive membership is essential for unified decision-making, leading to a positive impact on ROA and ROE. On the other hand, the increase in executive membership on the board of directors might negatively indicate the investors and negatively affect the EPS. May interpretation executive membership focus to success and generate accounting profit, gain personal bonus rather than the benefit of price market share.

The finding agrees with Stewardship Theory that suggests managers and executives board members are willing to do their duties to grow a firm (Doa & Ngo, 2020). This is also consistent with Stakeholders Theory, positing that the BOD is concerned with protecting all stakeholders, whether individuals or groups (Freeman et al., 2004). This result is consistent with Kaymak and Bektas (2008), who found a positive relationship between executive board members and firm performance. On the other hand, Doa and Ngo (2020) found that the number of members holding both executive and board of directors' positions had no significant relationship with firm performance. However, in Romania, Borlea et al. (2017) found that higher presence of outside directors and equilibrium between inside and outside directors did not impact firm performance.

Thus, it can be concluded that the executive membership had a positive association with the accounting-based performance such as ROA and ROE and a negative association with the market-based performance (EPS). Accordingly, an increase in executive membership will lead to an increase in the ROA and ROE. However, an increase in executive membership will decrease the EPS among Malaysian Takaful companies. This could be because an increase in executive membership can make decision-making fast and timely, positively impacting ROA and ROE.

Therefore, hypothesis H3 of this study was supported based on the accounting-based performance indicators (ROE), and not supported based on the market-based performance measure (EPS).

5.6.1.4 Muslim Directors and Financial Performance

The fourth hypothesis of this study proposed that the Muslim directors in the BOD would have a positive association with the financial performance of Takaful companies in Malaysia, “H4: Muslim Directors are positively related to the performance of Malaysian Takaful companies.”

The findings presented in Table 5.16 showed the results of testing the hypothesis with the three dependent variables of this study. The findings showed that this association was positive and significant (Coefficient = 0.387, T= 5.34, p=0.000) at 0.001. Thus, Muslim directors had a positive impact on the ROA of Takaful companies in Malaysia.

For the association with ROE, the findings showed that the effect of Muslim directors on the ROE was positive and significant (Coefficient = 0.491, T = 6.43, p=0.000) at 0.001. Thus, similar to ROA, the Muslim directors had a positive impact on the ROE of the Malaysian Takaful companies. For market-based performance, the finding showed that the effect of Muslim directors on EPS was positive and significant (Coefficient = 0.541, T= 2.31, p=0.020) and significant at 0.05. Accordingly, it is concluded that the existence of Muslim directors on the board of the Takaful companies in Malaysia will have a positive impact on the accounting-based performance, i.e. ROA and ROE, and market-based performance (EPS).

The positive effect could be related to the fact that Malaysia is a majority Muslim country. Having Muslim directors on the board increases assurance to insurance companies' customers, resulting in a positive increase in ROA and ROE. Also, the existence of Muslim director increases the confidence of Muslim investors to buy shares of the companies resulting in a positive impact on EPS.

This finding agrees with Stakeholders Theory that posits that a business is responsible for protecting the implied inviolability agreements by protecting the rights of all concerned parties including customers, investors, sellers, workers, and local communities. Shariah law that promotes social order and economic development is granted and maintained (Islam & Bhuiyan, 2019).

Resource Dependency Theory posits that a diversity of religion can enhance firm performance through sharing of expertise, knowledge and experience in the decision-making process (Ramly, 2018). The result of the current agrees with Ibrahim and Alam (2018). They found a significant and positive association between Muslim directors and financial performance and indicate that Muslim directors significantly impact firm performance due to their religious beliefs related to economics, morals, and dealings. Similarly, Mollah et al. (2017) noted that Muslim directors' involvement at the board top-level could improve managers' risk-taking behaviour and enhance their firms' internal tasks and performance. Takaful operates because it is an Islamic company. So, many board members are Muslims, and the decision making depends on their knowledge, experience, and background, which enhance financial performance.

Therefore, hypothesis H4 of this study was supported based on the accounting-based performance indicators (ROA and ROE) and supported based on the market-based performance measure (EPS).

5.6.1.5 BOD meeting Frequency and Financial Performance

The fifth hypothesis of this study posited a positive association between BOD meeting frequency and financial performance of Takaful companies in Malaysia, “H5: Meeting Frequency will be positively related to the performance of Malaysian Takaful companies.

The findings indicate a significant and negative effect on the ROA. (Coefficient = -0.015, T = -2.01, p = 0.043) at 0.05. Thus, the increase in the number of BOD meeting will negatively impact ROA. Similarly, the findings showed a negative association between BOD meeting frequency and the ROE (Coefficient = -0.021, T = -2.09, p = 0.033) in terms of the ROE. In terms of the EPS, the findings showed a negative relationship between BOD meeting frequency and the EPS (Coefficient = -0.004, T = -0.24, p = 0.614). However, this relationship was not statistically significant.

This finding, in contrast with the Agency Theory perspective, which posits that board of directors' effectiveness is related to frequent board meetings, leading to an improvement in board performance and better governance. The positive direction is consistent with Resource Dependence Theory, which assumes that frequent board meetings can assess and track the timeliness of the board's activities to find solutions to any difficulties encountered by a firm (Al-Matari et al., 2014).

The negative finding indicates that an abnormally high frequency of meetings leads to a decrease in ROA because there are costs related to the frequency of meetings of the board of directors, such as managerial time, hotel accommodation, travel costs, and meeting expenses. This result consistent with Abdulsamad (2018) in a study of Malaysia public listed companies that revealed board meetings were statistically significant and negatively related to firm performance. Christensen et al. (2014) also found a negative impact of board meetings' frequency on the Q-ratio in large Australian firms. However, the findings are inconsistent with the findings of previous studies found a positive relationship between board meetings and corporate performance (Ntim & Osei, 2011).

These finding could be explained based on the notion that an increase in the number of meetings of the board boosts operational costs, which, in turn, reduces ROA and ROE. In term of EPS, the effect is negative but insignificant, which also can be related to the same reason. In Malaysian Takaful companies some companies met 17 times during the year. One possible explanation of the insignificant finding is that the number of board meetings is more strongly associated with the need to deal with extraordinary situations and urgent circumstances than regular business decisions. Indeed, Habbash (2010) argues that frequent meetings might not always be a feature of an effective board.

Thus, it can be concluded that in term of the accounting-based indicators such as the ROA and ROE, the increase in the number of the BOD meeting will have a negative effect on the accounting-based performance. However, in term of market-based performance, there was no association.

Therefore, hypothesis H5 of this study was not supported based on the accounting-based performance indicators (ROA and ROE) and not supported based on the market-based performance measure (EPS).

5.6.1.6 Gender Diversity and Financial Performance

The sixth hypothesis posits that the effect of gender diversity on the financial performance of Takaful companies would be positive and significant, “H6: Gender diversity is positively related to the performance of Malaysian Takaful companies.”

The findings presented in Table 5.16 showed that the association was positive with accounting-based performance and market-based performance. For the association with ROA, the table shows that gender diversity had a positive association with ROA (Coefficient = 0.189, T = 3.39, p = 0.001) at 0.05. A similar positive and

significant association was found between gender diversity and the ROE (Coefficient = 0.197, T = 3.34, p = 0.001) 0.05. For the EPS, the association was also positive (Coefficient = 0.377, T = 2.19, p = 0.031) at 0.05.

One possible explanation is that an industry's nature influences male representation on boards of directors (Hillman et al., 2007). Malaysia has introduced several measures for women's advancement in this regard. One major catalyst for this development was establishing a ministry in 2001 that specifically promotes women's interests. Later, in 2004, the government formed a Cabinet Committee on Gender Equality, chaired by the then Prime Minister of Malaysia. Consequently, the government adopted a policy to appoint at least 30% women to decision-making levels in the public sector. Subsequently, in July 2011, the government extended the policy to listed firms and set 2016 as the deadline for compliance. So, females in Malaysian companies have strong position and effect on decision making. Also, the nature of Takaful companies and the financial sector encourages women to be involved in the committee (Abdullah, 2016).

This result agrees with Agency Theory and Resource Dependency Theory that suggests that more diversified corporate boards enhance financial performance. Women bring good views to complex problems which could preserve truthful information in a problem solving and decision-making processes and add quality resources, unique relations and commitments to the board (Wang, 2020; Francoeur et al., 2008; Ibarra, 1993).

This finding consistent with Jabari and Muhamad (2020) who found that more gender-diverse BOD and SSB are expected to have better financial performance in Malaysian and Indonesian Islamic banks. Mai (2021) The results show that female board of directors has a positive and significant influence on bank performance. Sabri

et al. (2020) found that gender diversity on the BOD improved Malaysian companies' financial performance. Lee-Kuen et al. (2017) found a positive relationship between gender diversity and financial performance in Malaysian listed companies. Assenga et al., (2018) found, concerning Resource Dependence Theory, that gender diversity had a positive impact on financial performance. Darko et al., (2016) found positive a positive impact on firm performance in Ghanaian firms. Aribi et al., (2018) suggested that women's participation in management positions positively impacted firm performance. Their participation could significantly impact the decision-making process and the variety of opinions and ideas that substantially impact firm performance (Green & Homroy, 2018). Having women on the board of directors will increase problem solving and provide companies with views that reflect the women's needs in the market, leading to better accounting and market-based performance (Nyatichi, 2016).

Accordingly, it can be concluded that gender diversity is positively related to the ROA and ROE of Malaysia's Takaful companies. This indicates that when the gender diversity in the BOD of the companies increases, the ROA and ROE will increase. Thus, the accounting-based performance will increase with more gender diversified BOD. A similar conclusion can be derived in term of market-based performance. The more diversification in terms of gender on the BOD will lead to better EPS.

Therefore, hypothesis H6 of this study was supported based on the accounting-based performance indicators (ROA and ROE) and supported based on the market-based performance measure (EPS).

5.6.1.7 BOD Effectiveness and Financial Performance

To measure the board effectiveness in this study, a composite measure (score) was created using the board effectiveness to test if there was an aggregate influence of effectiveness metrics on financial performance. The measurement of board effectiveness score was based on previous studies (e.g., Rasli, 2020; Mathew et al., 2018; Makhoul et al., 2017; Aomrah, 2015; Yousuf, 2010; Al-Ebel, 2013). This method is based on the notion that the effectiveness of corporate governance may be achieved via different channels (Cai et al., 2008) and that a particular mechanism's effectiveness may depend on the effectiveness of others (Rediker & Seth, 1995; Davis & Useem, 2002). Similarly, O'Sullivan et al. (2008) argue that an overall measurement of corporate governance mechanisms gives a more substantial effect than an individual effect.

The seventh hypothesis of this study was related to the BODE (BODE_score) and its relationship with the financial performance of Takaful companies in Malaysia. The study predicted that the relationship between the two variables would be positive “H7: There is a positive relationship between BODE (BODE_score) and the performance of Malaysian Takaful companies.”

The findings in Table 5.16 show the hypotheses testing regarding the effect of BODE_score and its sub-variables on the financial performance of Takaful companies in Malaysia. The findings showed that the BODE (BODE_score) had a positive relationship with the ROA (Coefficient = 0.241, T= 3.79, p=0.000) at 0.001. Thus, the hypothesis is confirmed with the ROA.

In terms of the ROE, the findings also showed a positive relationship between BODE (BODE_score) and ROE (Coefficient = 0.366, T = 5.19, p = 0.000) of Malaysian Takaful companies at 0.001. Thus, the hypothesis, as confirmed with ROE.

Lastly, with the EPS, the findings showed that the relationship between BODE (BODE_score) and EPS (Coefficient = 0.941, T= 3.44, p=0.000) was positive at a significance level of less than 0.001.

These findings are consistent with Kassim et al. (2012), who revealed that board effectiveness influences company performance in Malaysia. This leads to the conclusion that the hypothesis is confirmed with the accounting-based performance metrics (ROA and ROE) and an increase in BODE (BODE_score) will lead to an increase in the accounting-based performance of the Malaysian Takaful companies. This was also confirmed with the market-based performance, an increase in the BODE (BODE_score) will lead to a positive increase in the EPS of the Takaful companies in Malaysia. Therefore, this study's findings indicate that board of director effectiveness has a strong effect on Malaysian Takaful companies' financial performance.

Therefore, hypothesis H7 of this study was supported based on the accounting-based performance indicators (ROA and ROE) and supported based on the market-based performance measure (EPS).

5.6.2 Effect of Audit Committee on Financial Performance

This study developed five hypotheses related to the relationship between the audit committee and its sub-variables with the financial performance of Takaful companies in Malaysia. The findings of hypotheses testing are given in Table 5.17.

Table 5.17: Results of the Direct Effect of AC on Financial Performance

H	Independent Variables	Coefficient		
		ROA	ROE	EPS
	Constant	0.719***	0.559**	0.991**
H8	AC Chairman Specialization	0.046	0.065*	0.113
H9	AC Size	0.139**	0.044**	0.131*
H10	AC independence	0.179**	0.213**	0.212
H11	AC Meeting frequency	0.004	0.005	-0.042
H12	AC Effectiveness (ACE_score)	0.271**	0.193**	0.709**

*, **, *** indicates significance at the 10%, 5%, and 1% levels

5.6.2.1 AC Chairman Specialization and Financial Performance

The eighth hypothesis of this study predicted that the relationship between AC chairman specialization and performance of Malaysian Takaful companies would be positive, “H8: AC Chairman Specialization is positively related to the performance of Malaysian Takaful companies.”

The findings in Table 5.17 indicate that the chairman specialization had a positive but insignificant relationship with ROA (Coefficient = 0.046, T = 1.33, p = 0.159). On the other hand, the findings also showed that AC chairman specialization had a positive and significant relationship with the ROE (Coefficient = 0.065, T = 1.89, p = 0.061) at a significant level less than 0.1. The findings indicate that the relationship between chairman specialization and EPS (Coefficient = 0.113, T= 1.34, p=0.219) was positive but not significant for the relationship with EPS.

A possible explanation that when the AC chairman is specialized, this could potentially affect financial-related activities such as the ROE but not the operational activities such as ROA and market activities such as EPS. In this study, most AC chairman had financial backgrounds, so no major differences affected Malaysian Takaful companies' financial performance.

In Malaysia, Rashidah and Fairuzana (2006) argued that it was crucial for an AC to include competent and experienced directors in financial aspects. This is because an AC is first and foremost formed with the intent of monitoring a firm's financial reporting process. The chairman of the audit committee will especially affect decision-making and financial performance.

One possible interpretation is that most AC chairpersons had financial backgrounds, no major differences were present on the effect on Malaysian Takaful companies' financial performance.

Overall, the hypothesis related to the relationship between chairman specialization and ROA was rejected. Chairman specialization had no relationship with the ROA, and the changes in Chairman specialization had no impact on ROA. The chairman specialization impacted ROE. This confirms the hypothesis that linked chairman specialization with the ROE. Accordingly, an increase in chairman specialization will lead to a positive increase in the ROE of the Takaful Malaysian companies. Regarding the EPS, the findings indicate that the EPS will not be affected by the changes in chairman specialization. Thus, the related hypothesis was rejected.

5.6.2.2 AC Size and Financial Performance

The ninth hypothesis proposed that the AC size would have a positive relationship with the financial performance of the Takaful companies in Malaysia, “H9: AC Size is positively related to the performance of Malaysian Takaful companies.”

The findings in Table 5.17 show that the AC size had an significant and positive relationship with ROA (Coefficient = 0.139, T = 2.13, p = 0.037). In term of the relationship with ROE, the findings showed that the relationship between AC size and ROE (Coefficient = 0.044, T = 2.33, p = 0.024) positive and a significance level of less than 0.05. The relationship between AC size and EPS was positive and significant (Coefficient = 0.131, T = 1.98, p = 0.048) at level of less than 0.05.

A possible explanation of the positive effect on ROE is the AC size contributes to the goodness of the ROE activities but not to the ROA. In addition, when the size of

AC is large and includes specialized and trusted members, investors' confidence will increase, and this will result in an increase in EPS.

This current study's results are consistent with the Agency Theory and Resource Dependence Theory perspective, suggesting that an audit committee's effectiveness increases as the size of the committee increases because it has more resources with which to address the issues faced by the company. This result for ROA agrees with Zraiq and Fadzil (2018), who found a positive direction but insignificant relationship between audit committee size and ROA. In addition, the insignificant results may be attributed to the probability that the chief executive officer (CEO) controls the board's actions, which might result in information asymmetry (Al-Matari et al., 2014).

This finding is consistent with Alqatamen (2018), who found that audit committee size enhances company performance. Aldamen et al. (2012) examined the relationship between audit committee effectiveness and company performance during a global financial crisis; their findings indicated that companies with a large audit committee size were associated with better financial performance. In addition, previous studies have found a positive association regarding the role of AC size on ROE (Siam et al., 2018; Ayemere & Elijah, 2015; Al-najjar, 2011) supporting the notion that the relationship was positive and significant. They argued that a large board has a broader knowledge base. This base helps the board make better decisions and handle different problems, including Agency problems.

The finding for EPS is constant with (Zraiq & Fadzil, 2018) found a positive direction and significant relationship between audit committee size and EPS. Dalton et al., (1998) found a positive association between audit committee size and EPS, arguing that the monitoring process resulted in higher performance.

Thus, the hypothesis was accepted in term of the relationship between AC size and ROE and ROE as well as AC size and EPS. Therefore, it can be concluded that the increase in the AC size will affect the ROE, ROA and the EPS positively. Accordingly, an increase in AC size will positively impact ROE, ROA and EPS.

5.6.2.3 AC Independence and Financial Performance

The tenth hypothesis predicted that the independence of AC would have a positive relationship with the financial performance of the Takaful companies in Malaysia, “H10: AC Independence is positively related to the performance of Malaysian Takaful companies.”

Table 5.17 presents the results of hypotheses testing. It can be seen that AC independence had a positive relationship with the ROA (Coefficient = 0.179, T = 2.54, p = 0.009) at less than 0.05. This supports the hypothesis and indicates that an increase in AC independence will lead to a positive increase in the ROA of Malaysian Takaful companies.

In terms of AC independence and its relationship with ROE, the findings showed a positive relationship between AC independence and ROE (Coefficient = 0.213, T = 3.19, p = 0.002) at 0.05. Thus, an increase in AC independence will result in an increase in the ROE of Malaysian Takaful companies. For the relationship with the EPS, the findings showed that the relationship was positive at 0.212 but was not significant because the p-value of the relationship was greater than 0.1. Thus, this shows that AC independence changes will not affect the EPS of the Malaysian Takaful companies.

The positive effect of AC independence could be related to the fact that decision making, and quality of financial reporting are essential to improvement in the ROA

and ROE and the EPS. This is because investors will watch closely the independence of AC to trade the share of companies. This result compatible with the arguments of Agency Theory, Stakeholders Theory and Resource Dependency Theory, which suggest that more independence members lead to decreased agency problems and more diverse experience sand resources (Hasan et al., 2020).

Previous study has supported the positive effect of AC independence. Researchers have found an association between the independence of the AC and the effectiveness of the AC, which always reflected on the performance of companies (Alqatamin, 2018; Amoush, 2017; Inaam & Khamoussi, 2016; Hamid et al., 2015). Independent AC members play an essential role because they monitor the activities of the management. They are not related to the management so that their existence does not create a conflict of interest. The stakeholders appoint them so that management has no effect and cannot influence their decisions (Aanu et al., 2014).

The result of the relationship between EPS and AC independence is consistent with Bansal and Sharma (2016), who found no effect between the level of independent and EPS in Indian companies.

Overall, the hypothesis related to the relationship between AC Independence and accounting-based metrics (ROA and ROE) is accepted. AC independence had a positive relationship with the (ROA and ROE) and the changes in AC independence increase ROA and ROE in Malaysian Takaful companies. This confirms the hypothesis that linked AC independence with the ROA and ROE. Accordingly, this indicates that an increase in the number of independent AC members boosts the accounting-based performance of the Malaysian Takaful companies. Thus, the related hypotheses are supported. Regarding the EPS, the findings indicate that the EPS will not be affected by AC independence changes. Thus, the related hypothesis is rejected.

5.6.2.4 Meeting Frequency and Financial Performance

The eleventh hypothesis of this study proposed that the relationship between meeting frequency of AC was positively related to the financial performance of Malaysian Takaful companies “H11: Meeting frequency is positively related to the performance of Malaysian Takaful companies.”

The findings in Table 5.17 shows that the relationship between meeting frequency of AC with financial performance was insignificant. (Coefficient = 0.004, T = 0.89, p = 0.391).

For the relationship between AC meeting frequency and ROE, the findings showed that the relationship was not statistically significant (Coefficient = 0.005, T = 0.34, p = 0.731). Thus, the hypothesis is rejected.

For the relationship with EPS (Coefficient = -0.005, T = -0.34, p = 0.731), the findings also showed that the AC meeting frequency had an insignificant relationship with the EPS. Thus, the hypothesis is also rejected.

This result aligns with the findings of Abdul and Haneem (2006) and Mohd Saleh et al. (2007) in Malaysia that reveal that a lower number of AC meetings improved the financial performance of the firm as it reduced the additional costs incurred with every meeting. This result is not surprising because many empirical studies which examined the association between the frequency of audit committee meetings and financial performance found no relationship. This result contradicts Agency Theory, which suggests that more audit committees' meetings would lead to reduced agency problems. The negative finding indicates that an abnormally high frequency of meetings leads to a decrease in ROA because there are costs related to the frequency of meetings of the board of directors, such as managerial time, hotel

accommodation, travel costs, and meeting expenses. The finding is consistent with other studies (e.g., El Mehdi, 2007; Ntim, 2009; Albassam, 2014).

One possible explanation of this finding is that audit committee meetings' frequency may not be a good indicator of the audit committee's diligence and activity (Habbash, 2010). Spira (1999) claimed that audit committee meetings are mostly ineffective in enhancing financial reporting because the meetings are primarily ceremonial. Additionally, Malaysian Takaful companies have the SC take responsibility for monitoring and controlling activities.

Overall, AC meeting frequency has an insignificant effect on accounting-based performance (ROA and ROE). This means that the AC meeting frequency changes will not affect the ROA and ROE of Takaful companies in Malaysia. Similar findings were derived regarding the EPS. The increase or decrease in AC meetings will not affect the EPS of Malaysian Takaful companies. Therefore, H11 was rejected.

5.6.2.5 AC Effectiveness and Financial Performance

To measure the audit committee effectiveness, a composite measure (score) was created using the audit committee effectiveness to test if there is an aggregate effect of these effectiveness metrics on financial performance. The score measurement of audit committee effectiveness is based on prior studies (e.g., Rasli, 2020; Shatnawi, 2020; Mathew et al., 2018; Makhlouf et al., 2017; Siam, 2015; Nimer et al., 2012).

The twelfth hypothesis predicted that the effect of ACE (ACE_score) on the financial performance of Takaful companies in Malaysia would be positive, "H12: There is a positive relationship between ACE and the performance of Malaysian Takaful companies."

The findings in Table 5.17 show that the relationship between ACE (ACE_score) and ROA was positive and significant, with a coefficient of 0.231 at a significance level of less than 0.05. In term of ROE, the findings in Table 5.17 show that the ACE_score had a positive relationship with ROE. The coefficient of 0.193 was statistically significant at 0.05. Thus, the hypothesis was accepted. The relationship between ACE_score and EPS was positive and significant, with a coefficient of 0.709 and a significance level of 0.05.

The results of the study support Agency Theory, which assumes that an effective audit committee improves financial performance. This result indicates that the effectiveness of audit committee plays a vital role in improving corporate financial performance and minimising agency problem by reducing information asymmetry between owners and management and creating robust decision-making (Garcia-Meca & Sanchez-Ballesta, 2009; Habbash, 2010; Abu Haija, 2012).

Thus, it can be concluded that the ACE has a positive effect on the ROA and ROE of the Malaysian Takaful companies. This means that an increase in AC effectiveness will result in a positive increase in the accounting-based performance of Malaysian Takaful companies. It also means that an increase in ACE will result in an increase in the EPS of the Malaysian Takaful companies. Accordingly, H12 is supported.

5.6.3 Control Variable and Financial Performance

This section discusses the effect of control variables (firm size, firm age, and leverage rate) on ROA, ROE, and EPS.

5.6.3.1 Control variables and ROA

The findings of hypotheses testing given in Table 5.13 show the relationship between control variables and ROA. Firm size has an insignificant effect on ROA with the coefficient value of -0.003 and p-value greater than 0.919. Thus, firm size has no relationship with the ROA.

This indicates that the increase in Takaful companies' leverage will lead to an increase in the ROA. For the firm age, the relationship between firm age and ROA was not significant. Thus, firm age had no relationship with the ROA of Takaful companies in Malaysia. In term of the relationship between leverage rate and ROA, the coefficient was positive and significant (coef. =0.441**).

5.6.3.2 Control Variables and ROE

For the relationship between the control variable, i.e., firm size, firm age, and leverage rate, and the ROE of Takaful companies in Malaysia, the findings in Table 5.14 show the relationship between firm size and ROE was not significant due to a p-value greater than 0.10. Firm age had a significant and negative relationship with the ROE of Takaful companies in Malaysia. This indicates that an increase in the age of a Takaful company will reduce the ROE of that company. For the relationship between leverage and ROE, the findings showed no relationship because the p-value was larger than 0.10.

5.6.3.3 Control Variables and EPS

The relationship between control variables and EPS is discussed in this section. The results of testing the relationship between control variables and EPS are given in Table 5.15. Table 5.15 shows that the relationship between firm size and EPS was not significant because the p-value of the relationship was greater than 0.10. Similarly, in

terms of firm age, the relationship with EPS was also not significant. The relationship between leverage rate and EPS of Takaful companies in Malaysia was not significant. Thus, the control variables had no relationship with the EPS of Takaful companies in Malaysia.

5.6.4 Summary of Direct Effect hypotheses

Table 5.18 summarizes the 12 direct hypotheses of this study. There were seven hypotheses (H1-H7) related to the relationship between BOD and its sub-variables with the financial performance of Takaful companies. In addition, five hypotheses (H8-H12) were related to the relationship between AC and its sub-variables with financial performance.

Overall, 27 of the 42 proposed hypotheses were accepted, and the variables were able to explain a percentage between 56% to 78% of the variation in the dependent variables of this study.

Table 5.18: Summary of Direct Hypotheses

H	Independent Variables	<u>Return on Assets</u>				<u>Return on Equity</u>				<u>Earnings Per Share</u>			
		Predicted sign	Actual sign	Sig level	Conclusion	Predicted sign	Actual sign	Sig level	Conclusion	Predicted sign	Actual sign	Sig level	Conclusion
H1	BS	+	+	Not Sig	Rejected	+	+	Not Sig	Rejected	+	+	Sig 5%	Accepted
H2	BI	+	+	Sig 5%	Accepted	+	+	Not Sig	Rejected	+	+	Sig 1%	Accepted
H3	EM	+	+	Not Sig 5%	Rejected	+	+	Sig 1%	Accepted	+	-	Sig 5%	Rejected
H4	MD	+	+	Sig 1%	Accepted	+	+	Sig 1%	Accepted	+	+	Sig 5%	Accepted
H5	BOD ME	+	-	Sig 5%	Rejected	+	-	Sig 5%	Rejected	+	+	Not sig	Rejected
H6	GD	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted
H7	BODE	+	+	Sig 1%	Accepted	+	+	Sig 1%	Accepted	+	+	Sig 1%	Accepted
H8	(BDE_score) AC CS	+	+	Not sig	Rejected	+	+	Sig 10%	Accepted	+	+	Not sig	Rejected
H9	AC Size	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted	+	+	Sig 10%	Accepted
H10	ACI	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted	+	+	Not sig	Rejected
H11	AC MF	+	+	Not sig	Rejected	+	+	Not sig	Rejected	+	+	Not sig	Rejected
H12	ACE			Sig 1%	Accepted	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted
	Firm size			Not sig				Not sig				Not sig	
	Leverage			Sig 5%				Not sig				Not sig	
	Firm Age			Not Sig				Sig 5%				Not sig	
R ²		0.77				0.56				0.78			

5.7 Moderating Effect of SCQ between BOD and Financial Performance

This study had two main hypotheses related to the moderating effect of SCQ between BODE and ACE, and the financial performance of Takaful companies in Malaysia. Several ways exist to test a moderating effect. One is hierarchical regression that relies on changes in the r-square and is mainly used in the SPSS environment. However, when using structural equation modelling such as AMOS, PLS, and STATA, a simpler method exist to test the moderating effect of variables. Researchers such as Hair et al. (2010) and Awang (2014) suggested first to standardize the data and then test for the moderating effect. The test is conducted by multiplying the independent variables (i.e., BODE and ACE) by the moderator (SCQ) to create a new variable known as the moderating effect (i.e. BODE*SCQ, ACE*SCQ).

Thus, in this study, the independent variables were multiplied by the moderator to create the moderating effect and then examining this moderating effect on the three dependent variables (ROA, ROE, and EPS). The first moderating effect hypothesis proposed that SCQ would moderate the effect of the BODE on the financial performance of Takaful companies, “H13: The relationship between BODE and the performance of Malaysian Takaful companies is moderated by SCQ.” The second moderating effect hypothesis proposed that SCQ would moderate the effect of the ACE on the financial performance of Takaful companies, “H14: The relationship between ACE and the performance of Malaysian Takaful companies is moderated by SCQ.”

In line with the hypotheses, the third and fourth objectives of this study were to investigate the impact of the SCQ on the relationship between the BODE and ACE on Malaysian Takaful company performance. In the following tables, the moderating

effect of SCQ with each dependent variable is presented and further discussed in separate sections for clarity in presenting the results.

The moderating effect of SCQ between BODE (BODE_score) and AC effectiveness (ACE_score) and ROA as a dependent variable was examined. The model was statistically significant at prob>chi2 equal to 0.000 and explained 59% of the variation in the ROA. The control variables of leverage and firm age had a positive and significant effect, while firm size had an insignificant effect. BOD effectiveness and AC effectiveness affected the ROA significantly. SCQ had an insignificant effect. Table 5.19 presents the results of testing the moderating effect of SCQ. Further details of the moderating hypotheses are discussed in coming sections.

Table 5.19: Moderating Effect of SCQ Between BODE, ACE and ROA

ROA	Coef.	Std. Err.	t	P>t
BOD Effectiveness	0.222**	0.069	3.13	0.003
AC Effectiveness	0.231***	0.064	4.21	0.000
SCQ	0.014	0.034	0.59	0.533
BODEXSCQ	0.079**	0.011	4.79	0.002
ACEXSCQ	0.057**	0.015	4.09	0.001
Firm Size	0.004	0.004	0.69	0.579
Leverage	0.631**	0.173	3.83	0.001
Firm age	0.014*	0.009	1.98	0.047
Constant	0.711***	0.168	4.14	0.000
F (5, 94)	21.83			
Prob>F (P-value)	0.000			
R-squared	0.59			

*, **, *** indicates significance at the 10%, 5%, and 1% levels

For the moderating effect of SCQ with the ROE as a dependent variable, Table 5.20 shows the results of testing the moderating effect of SCQ between BODE and ACE with ROE. The p-value of the model was 0.000 indicating statistical significance, and the r-square was 0.531 indicating that 53.1% of the variation in the ROE can be explained by BOD effectiveness, AC effectiveness, SCQ, the moderating effects, and the control variables of firm size, leverage, and firm age. Among the control variables, only the effect of firm age was significant. The effect of BOD

effectiveness and AC effectiveness was significant, while the effect of SCQ was insignificant. Table 5.20 shows the result of testing the moderating effect of SCQ.

Table 5.20: Moderating Effect of SCQ Between BODE, ACE and ROE

ROE	Coef.	Std. Err.	t	P>t
BOD Effectiveness	0.289***	0.081	3.39	0.000
AC Effectiveness	0.151**	0.073	2.05	0.034
SCQ	0.034	0.036	0.92	0.813
BODEXSCQ	0.048**	0.016	3.01	0.012
ACEXSCQ	0.037**	0.014	2.91	0.003
Firm Size	0.007	0.006	1.19	0.331
Leverage	0.029	0.183	0.35	0.892
Firm age	-0.017**	0.004	-2.69	0.020
constant	-0.228	0.187	-1.22	0.226
F (5, 94)	17.53			
Prob>F (P-value)	0.000			
R-squared	0.531			

*, **, *** indicates significance at the 10%, 5%, and 1% levels

For the third dependent variable, EPS, Table 5.21 presents the result of testing the moderating effect of SCQ between BODE and ACE, and EPS. It shows that firm size, leverage, and firm age had an insignificant effect on EPS. The effects of BOD effectiveness and AC effectiveness on EPS were significant. SCQ had a significant effect on EPS. The model was significant at a p-value of 0.000, and the r-square was 0.493, indicating that the included variables explain 49.3% of the variation in EPS/.

Table 5.21: Moderating Effect of SCQ Between BODE, ACE and EPS

EPS	Coef.	Std. Err.	t	P>t
BOD Effectiveness	0.719**	0.144	5.08	0.000
AC Effectiveness	0.582**	0.221	2.45	0.007
SCQ	0.054**	0.019	3.29	0.014
BODEXSCQ	0.108**	0.032	2.91	0.003
ACEXSCQ	0.019	0.050	0.26	0.871
Firm Size	0.015	0.039	0.86	0.412
Leverage	0.209	0.610	0.32	0.813
Firm Age	-0.014	0.023	-0.77	0.434
Constant	-0.341	0.340	-1.01	0.943
F (5, 94)	15.97			
Prob>F (P-value)	0.000			
R-squared	0.493			

*, **, *** indicates significance at the 10%, 5%, and 1% levels

In the following sections, the details of the hypotheses are given. First, the moderating effect of SCQ between BODE and financial performance was discussed, followed by the moderating effect of SCQ between ACE and financial performance.

5.7.1 Moderating Effect of SCQ between BODE and ROA

The result of hypotheses testing in Table 5.19 shows that the moderating effect (BODEXSCQ) was positive, with a coefficient of 0.079 at a significance level of 0.05. Thus, SCQ can play a moderating role between BOD effectiveness and ROA, indicating that the increase in the level of SCQ as a moderator will lead to an increase in the relationship between BOD effectiveness and ROA.

Figure 5.4 presents two ways of interaction. The figure shows there is interaction when the high SCQ intercepts with low SCQ. Because the high SCQ is above the low SCQ, there is a positive moderating effect.

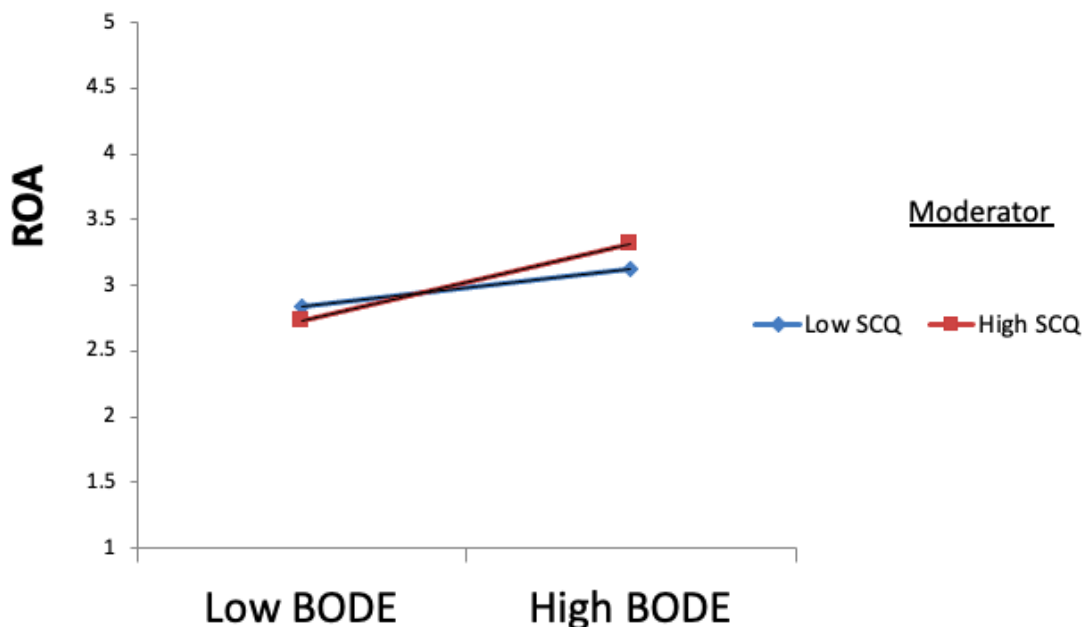


Figure 5.4: Two Way Interaction Between BODE and SCQ on ROA

Thus, SCQ moderates the relationship between BOD effectiveness and ROA positively.

5.7.2 Moderating Effect of SCQ between BODE and ROE

The second part of H13 was examining the moderating effect of the SCQ between BOD effectiveness and ROE. The result in Table 5.20 shows that SCQ had a significant effect while its moderating effect, i.e., BODEXSCQ, was positive and significant with a coefficient of 0.048 and a significance level of less than 0.05. Thus, this indicates that the SCQ had a moderating effect between BOD effectiveness and ROE. This moderating effect was positive due to the positive sign in front of the coefficient. To confirm this moderating effect, the two-way interaction between BOD effectiveness and SCQ is given in Figure 5.5.

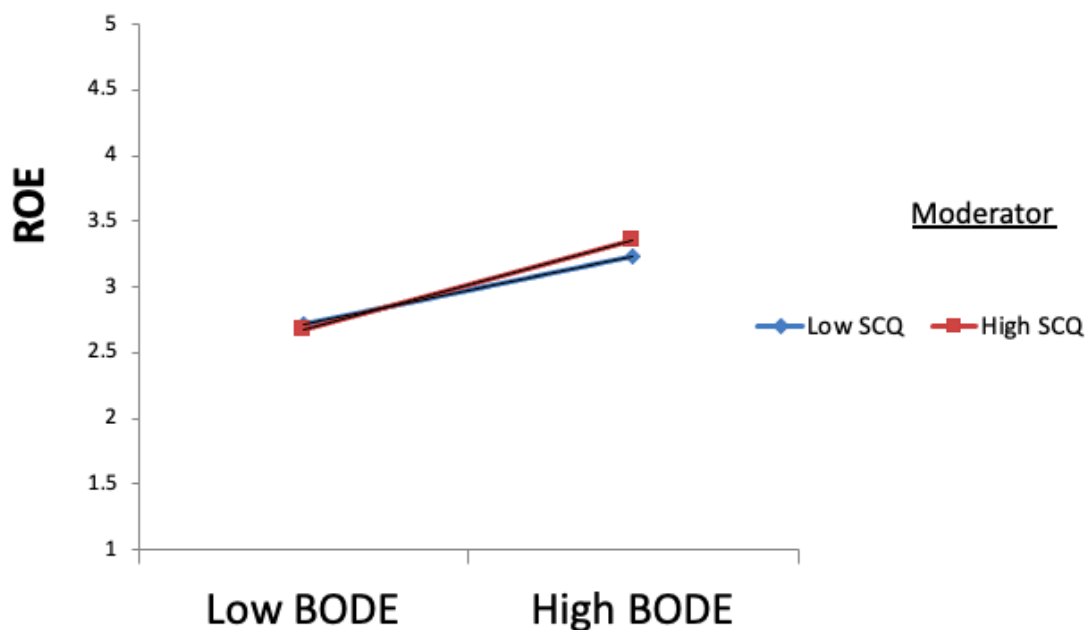


Figure 5.5: Two Way Interaction Between BODE and SCQ on ROE

The two lines are not in parallel, and there is an interaction. The high SCQ is above the low SCQ, indicating that the interaction is positive. Accordingly, there is a moderating effect, and this moderating effect is positive. Thus, an increase in the SCQ as a moderator will increase the positive relationship between BOD effectiveness and ROE.

5.7.3 Moderating Effect of SCQ between BODE and EPS

For moderating effect of SCQ between BOD effectiveness and EPS, the analysis was conducted, and Table 5.21 presents the results. The findings show that the moderating effect was positive and significant. This is because the moderating effect (BODXSCQ) coefficient was 0.108 and significant at the 0.05 level.

For graphical presentation of this moderating effect, the two-way interaction between SCQ and BOD effectiveness is given in Figure 5.6.

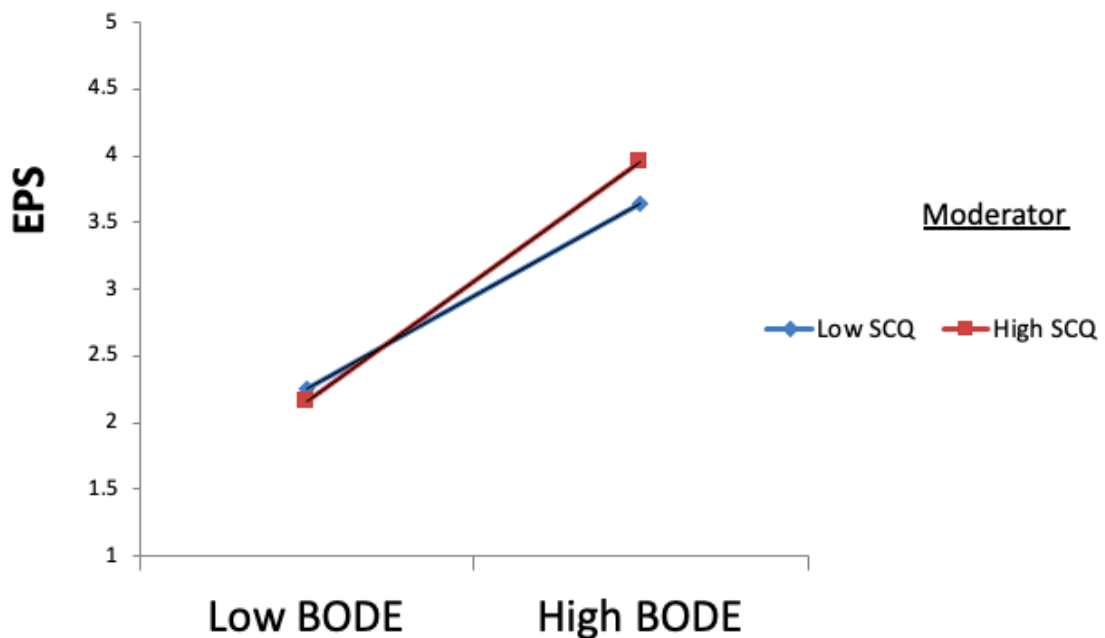


Figure 5.6: Two Way Interaction Between SCQ and BODE on EPS

Figure 5.6 shows that the two lines intersect. This confirms a moderating effect. The high SCQ is above the low SCQ, indicating that the moderating effect was positive. Thus, an increase in the level of SCQ as a moderator will lead to an increase in the relationship between BOD effectiveness and EPS.

A possible explanation that the increase in the level of SCQ is an indication for the customers and investors that the company is Shariah compliance, enhancing the company's reputation and increasing the effect of BOD on company performance.

This finding agrees with Resource Dependency Theory, where a high-quality SC will increase the relationship between BOD and Takaful performance. The result is consistent with Neifaret al. (2020) and Ajili and Bouri (2018), who found Shariah Supervisory board quality had a positive and significant moderating role on performance.

Hypothesis 13 was accepted as SCQ positively and significantly moderated the relationship between with BODE on ROA, ROE, and BODE on EPS.

5.8 Moderating Effect of SCQ between ACE and Financial Performance

The fourteenth hypothesis of this study predicted that the SCQ would moderate the effect of ACE on the financial performance of Takaful companies in Malaysia positively. The hypothesis statement is, “H14: SCQ will moderate the relationship between AC effectiveness and the performance of Malaysian Takaful companies.

The analysis was conducted using the moderating effect created by multiplying the SCQ with ACE (ACEXSCQ). The moderating effect was then tested with the three dependent variables, i.e., ROA, ROE, and EPS. In the next sections, the results of testing the moderator are elaborated.

5.8.1 Moderating Effect of SCQ between ACE and ROA

Table 5.19 shows the moderating effect of SCQ between ACE and ROA. The moderating effect, i.e., ACEXSCQ, was positive with a coefficient of 0.057 at a significance level of less than 0.05. This shows that SCQ moderated the effect of ACE on ROA positively. Figure 5.7 shows the two-way interaction between ACE and SCQ on ROA to confirm this moderating effect.

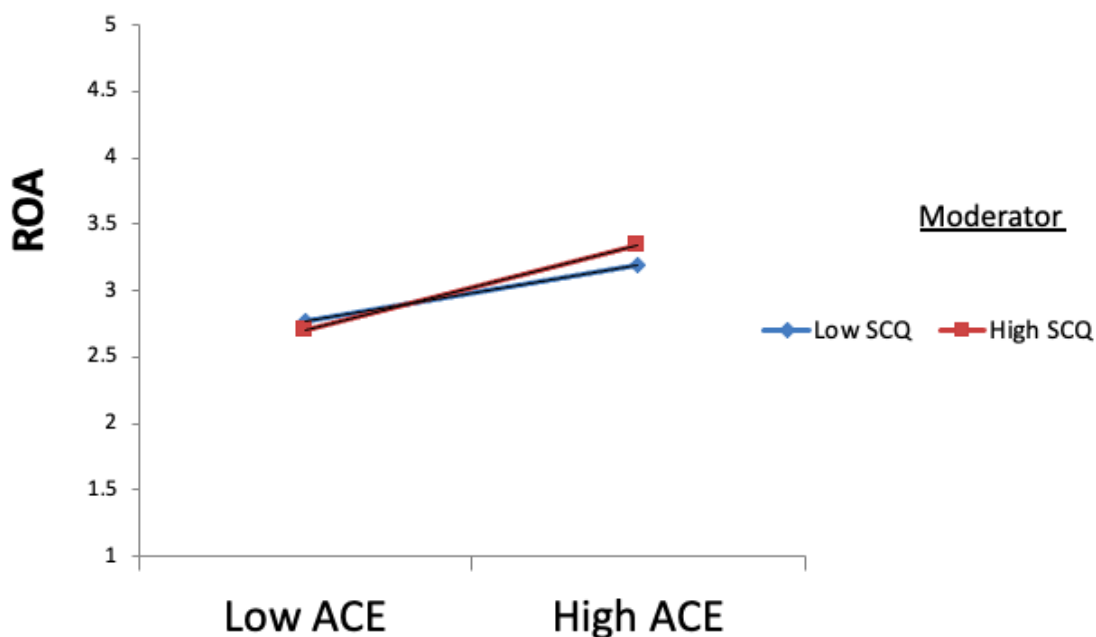


Figure 5.7: Two Way Interaction Between ACE and SCQ on ROA

The two lines intercepted in one point, indicating a moderating effect. The high SCQ is above the low SCQ indicates that the moderating was positive. This led to the conclusion that an increase in SCQ as a moderator will strengthen the positive relationship between ACE and ROA.

5.8.2 Moderating Effect of SCQ between ACE and ROE

The moderating effect of SCQ between ACE and ROE was tested, and the result is presented in Table 5.20. The effect of ACEXSCQ on ROE was positive and significant (Coef = 0.037, $p < 0.05$). Thus, moderation was present, and it is positive. Figure 5.8 shows the two-way interaction of SCQ and ACE on ROE to confirm the moderation and direction.

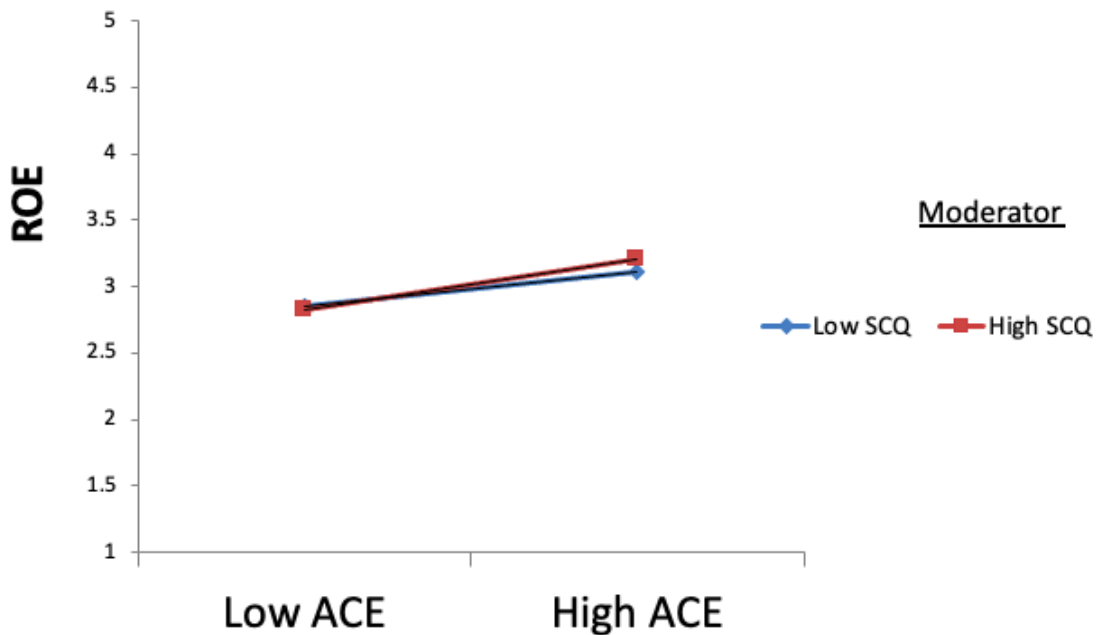


Figure 5.8: Two-Way Interaction Between ACE and SCQ on ROE

The figure shows that the two lines intersected, and this confirms that moderation occurred. To confirm the direction of the moderating effect, high and low SCQ are examined. The high SCQ located above the low SCQ indicates that the moderation was positive. Thus, the increase in SCQ as a moderating variable will enhance the positive relationship between ACE and ROE.

5.8.3 Moderating Effect of SCQ between AC and EPS

Table 5.21 showed the results of testing the moderating effect of SCQ between ACE and EPS. The moderation effect of SCQ between ACE and EPS was not significant because the coefficient of ACEXSCQ of 0.019 was not significant as the p-value (0.871) was greater than 0.1. Figure 5.9 shows that the two lines were parallel, confirming no interception, which means no moderation occurred. Nevertheless, Table 5.21 shows that the SCQ effect on EPS was positive and significant (Coef= 0.054, p = 0.014). Thus, SCQ does not moderate the effect of ACE on EPS, but it directly affects EPS.

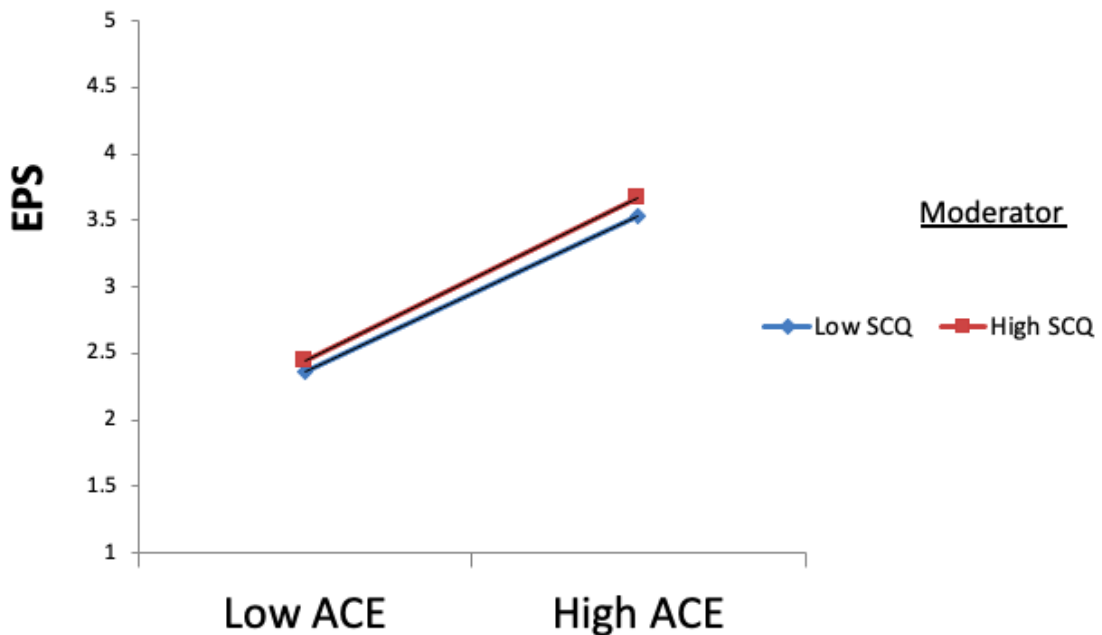


Figure 5.9: Two-Way Interaction Between ACE and SCQ on EPS

5.9 Summary of Moderating Testing

The findings of the study explored that the SC has significant role on the Malaysian Takaful companies for ensuring of its conformity with the Shariah standards by implementing of essential roles to design and promote principles of fairness, accountability, and transparency to meet of all the stakeholder's rights such as shareholders, the workers, the depositors, and the customers, etc. To simplify the results of testing the moderating effect of SCQ between BODE_score and financial performance and between ACE_score and financial performance, Table 5.22 shows a summary of the moderating effect of SCQ with financial performance.

Table 5.22: Summary of Moderating effect hypotheses of SCQ

Hypothesis	Dependent variables	Return on Assets				Return on Equity				Earnings Per Share			
		Moderating effect	Predicted sign	Actual sign	Sig level	Conclusion	Predicted sign	Actual sign	Sig level	Conclusion	Predicted sign	Actual sign	Sig level
H13	BODXSCQ	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted	+	+	Sig 5%	Accepted
H14	ACEXSCQ	+	+	Sig 1%	Accepted	+	+	Sig 1%	Accepted	+	+	Not sig	Rejected
	Additional findings SCQ										+	Sig 5%	

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5.10 Chapter Summary

This chapter presented the findings of this study. The descriptive information on the variables was presented. The assumptions necessary for regression analysis were checked. This chapter examined missing values, outliers, normality, multicollinearity, autocorrelation, and heteroscedasticity. The data were declared as panel data. The Hausman test was conducted to choose between the fixed effect model and the random effect model. Based on the Hausman test, the fixed effect model was chosen.

The findings of the hypotheses testing showed that board size affected only EPS, while BOD independence had a significant effect on ROA and EPS. Executive membership affected the ROA and ROE positively while and negatively affected EPS. Muslim directors and gender diversity and the BOD effectiveness positively affected ROA, ROE and EPS. BOD meeting frequency negatively affected ROA and ROE.

The AC chairman specialization affected only ROE. AC size positively affected ROE and EPS, while AC independence affected only ROA and ROE. AC meeting frequency had an insignificant effect on ROA, ROE, and EPS. ACE had a significant positive effect on ROA, ROE, and EPS.

The moderating effect of SCQ was confirmed between BOD effectiveness and ROA, ROE and EPS. It was also found that SCQ moderated the effect of ACE on ROA and ROE but not on EPS. Additional findings showed that the SCQ has a positive direct effect on the EPS. All findings were discussed and compared with the findings of previous studies. Most findings were justifiable and in line with previous studies conducted in Malaysia or other parts of the world.

The current study consists of 42 hypotheses, of which 27 were accepted, and 15 were rejected. It is divided into three main variables (Return on Assets, Return on Equity, and Earnings Per Share).