Capital Structure Policy and Islamic Bank Performance: Panel Data Evidence from Gcc Countries

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ABSTRACT: *Previous studies have extensively established the effect of capital structure on bank performance. However, these previous studies are mostly from developed economies and focused on conventional banks.This study focused on the effect of capital structure on Islamic bank performance in GCC countries.Data of 25 public listed Islamic banks for the period 2005 to 2017 from five GCC countries were considered for this study. By using panel data analysis through fixed effect regression estimation, the findings showed that capital structure policy of Islamic banks in GCC countries has effect on their bank performance. The findings imply that Islamic banks need to maintain their pattern of capital structure by ignoring the concept of optimal capital structure since their pattern of capital structure have favorable influence on their overall performance.*

KEYWORDS: *Capital Structure, Islamic banks, Bank Performance, Equity, Debt, GCC Countries,*

I.   INTRODUCTION

Capital structure is described as a combination of debt and equity in long-term financing of the operations of firms. In finance term, it means the way a firm finances its assets across the blend of debt, equity or hybrid securities (Saad, 2010). According to Karadeniz, Kandir, Balcilar and Onal (2009) capital structure is the mix of a firm's long term liabilities and owners' equity. The capital structure of a firm is actually a mix of different securities.

In general, a firm can choose among many alternatives' capital structures. It can issue a large amount of debt or very little debt. It can arrange lease financing, use warrants or issue convertible bonds. It can issue dozens of distinct securities in countless combinations; however, it attempts to find the particular combination that maximizes its overall market value (Nirajini & Priya, 2013; Liang, Li, & Song, 2014; Njeri & Kagiri, 2013). The decision of capital structure is considered as vital because the profitability of a firm will have an effect to such decision (Taani, 2013). Consequently, it is being increasingly realized that a company should plan its capital structure to maximize the use of funds and to be able to adapt more easily to the changing conditions (Pandey, 2009).

In relate to Islamic banks, due to special nature of their deposits from key customers, Islamic banking firms are considered as unleveraged firms(Hassan, Farhat, & Al-zu'bi, 2003). The equity holders of Islamic banking firms are using their capital in a joint way with those who are providing deposits in the form of debt to the banking firms for the purpose of generating the cash flows and profit over time(Hassan et al., 2003). For this reason, the two significant sources for the Islamic banking firms are the equity and from the deposits through its customers. Besides Islamic bonds, in the form of Sukuk are also very much common nowadays. The earnings in the form of profit or in the form of losses are shared among the key investors and the banking firm. The majority of shared of Islamic banks are held by governments, government agencies, financial institutions and big individual investors(Hassan et al., 2003). The big individual equity investors from the Islamic banks' board of directors. At the same, those depositors who are holding their investment in the form of Mudaraba and Musharaka accounts are known as outside investors to the Islamic banks(Hassan et al.,2003).

Argument has been that since the cost of equity is higher compared to investment deposits because of the adverse selection problem, managers have preference to raise capital from investment deposits in order to maximize returns to shareholders(Hassan et al.,2003)In other words, Islamic banks as new comers to the market are facing a trade-off. They can either employ higher capital which increases soundness and safety of the bank, lowers the required return (risk) from investors (both shareholders and depositors) resulting in higher performance (profitability)(Basu, Prasad, & Rodriguez, 2015; Hassan et al.,2003). Otherwise they can depend on deposits and other hybrid sources of capital (Islamic bonds) which are usually considered cheaper sources of funds due to their tax deductibility, resulting in the higher performance (profitability)(Basu et al., 2015; Hassan et al.,2003). In this regard, as capital structure affects performance (Basu et al., 2015), this study aimed to examine the effect of capital structure policy of Islamic banks on their performance since there are very few studies that have established their relationship(Al-Kayed, Mohd Zain, & Duasa, 2014).

The remainder of this paper is organized as follows. Next section elaborates on the literature review; the third section explains the methodology; the fourth section provides results and discussions on the findings; the fifth section focused on conclusion with provision of implications, limitations and suggestions for future studies.

II.   LITERATURE REVIEW

The Basel IIIhas defined a specific level of capital to bemaintained by the banks to finance their assets. The stated level is more as compare toprevious level and for this purpose, (Milles, Yang, & G, 2012)have observed the idea that how the level of capital in the form of equity is higher for the banks as compare to minimum capital requirement under the regulations of Basel III. Financing decision and capital structure is the reflection of manager's efforts in the business with the core objective to balance out the impact of tax incentive. Such incentive is under the situation of higher debt amount and higher cost of financial distress. Additionally, financial distress is due to the higher level of debt which is no doubt, giving way to disturb the earning capacity and return factor of the business. But at the same time, lower use of debt and higher use of equity will also affect the value of the business as it may affect the earnings outcomes of the business (Barclay & Smith, 2012).

Abor, (2005)explained that business firm cannot get rid from the usage of debt in the balance sheet, so it will focus on the usage of secure debt. For instance, debt can be used as compare to common stock. To decidewhich level of capital is considered an optimal level of capital structure is very much difficult as there are no certain guidelines, rules and regulations. Although the nature of banking firms is totally different from others, but they also face the same challenges as the non-financial specifically in defining the optimal capital structure (Abor, 2005).

Practically, any change in the level of capital structure of the business, will not provide any success to the cost of debt as stated by M&M theorem. With the decline in the level of leverage in the business can provide a way for the required rate of return to decrease also (Milles et al., 2012). However, this proposition is not meant for the banking firms because of various reasons. Among these reasons, the most important is the different tax treatment for the level of equity and debt. Interest payment over the debt can be settled against the tax treatment of equity and debt, but tax which is paid on the dividend is not considered as tax deductible(Milles et al., 2012).

The level of deposit insurance can encourage the banking firm to substitute the equity with the deposit financing like debt. The proposition of M&M also explains that debt financing is totally secured due to presence of deposit insurance (Milles et al., 2012). In the mid-90s,Berger (1995)provided the fact that financing through equity is preferable for the investors as it can increase the rate of return. Though, at the same time owners provide the preference for the debt because of tax benefit. Over the time, the role of deposit varies for the business and some researchers have stated the fact that it can be optimal source of funding for the banking firm in almost all the countries (Diamond, 1984; Diamond & Dybvig, 1983).

The liquidity of the banking firms is also affected by the capital structure and finally the agency cost too. The cost to get the equity portion for the financing of bank's project is costlier as compare to the debt financing (Myers & Majluf, 1984; Bolton &Freixas, 2006). With the higher level of capital, banks can sustain their position in the market even at the time of financial distress and when the asset value is under variation (Milles et al., 2012). In the view of Solomon (1963), the major difference between the equity and debt portion of the balance sheet of the firm can be evaluated through the idea that debt holder will get the interest payments from the business, but no involvement in the activities of the business.While the equity holders will not only get the dividend payments from the firm but also have the voting right as well. If the business firm will get the financing from the debt it will borrow from the debt holders in the form of deposits and promise to pay the interest at regular intervals. On the other hand, shareholders, purchase the ownership of the company in the form of common or preferred shares and get the return from the operational activities of the business(Gitman & Zutter, 2010; Wakida, 2011).

Based on previous studies, there is no specific policy for capital structure since it is one of the strategic decisions as considered by the firms' managements, which has an effect on the cost of debt and will maximize the shareholders' wealth (Bain & Band, 2016; Meero, 2016). So, firms, specifically banking firms do not have the same optimal level "financial leverage (debt to equity ratio)". Meanwhile, there still exists a significant debate over the idea that optimal capital structure exists, and capital structure affects the firm performance and vice versa. This is due to reason that issue of capital structure is concerned with the increase in the value of the firm. Besides, this minimum weighted average cost of capital and performance of firm are linked to each other. When the value of the firm is maximum, the optimal level of capital structure in the form of debt to equity ratio will be achieved. At this point the cost of capital will be minimum as supported by (Firer & Williams, 2003; Brigham & Ehrhardt, 2003). De Wet (2006) explained that to achieve the significant increase in the value of the firm, business has to move to the optimal level of capital. Beattie, Goodacre, and Thomson (2006) have put a query over the theoretical work on the optimal level of capital structure, they argued that practical application of theory of capital structure is not very much extended and it has very limited implication. According to Amidu

(2007), choosing the rightcomposition of capital structure is still under-explored area because there is no clear understanding noticed among banks management and which factors affect their composition behavior.

III. METHODOLOGY

3.1 Data Environment

The population of this study is Islamic banks in GCC countries. Thirteen years (i.e., 2005to 2017) data of 25 listed Islamic banks in GCC countries were used, which resulted in unbalanced data of 294 firm-year observations.The data were retrieved from the Thomson Reuters DataStream.

3.2 Variables Measurement

The measurements for the variables are depicted in table 1 below.

Table 1: Variables Measurement

No	Variables	Connotation	Measurement
	Dependent Variables		
1.	Return on Assets	ROA	Net Income ÷Total Assets
2.	Return on Equity	ROE	Net Income ÷Common Equity
3.	Tobin's Q	TQ	(Market Value of Equity + Book Value of Liabilities) ÷ Book Value of Assets
	Independent Variables		
4.	Long-Term Debt	LTD	Fixed Liabilities ÷Total Assets
5.	Debt Ratio	DR	Total Liabilities÷Total Assets
6.	Equity Ratio	ER	Shareholders' funds÷Total Assets
7.	Financial Leverage	FL	Equity÷Total Liabilities
	Control variables		
8.	Asset Tangibility	AT	(Total fixed Assets ×Total Assets) ÷100
9.	Liquidity Risk	LR	Loans÷Customer and short-term funding
10.	Bank Efficiency	BE	Cost÷Total Income
11.	Credit Risk	CR	Non-performing Loan÷Total Libilities
12.	Bank Size	SIZE	Logarithm of Total Assets
13.	Bank's Age	AGE	Logarithm of Years of Operation

The data is estimated through the following model:

$$ROA_{it} = \beta_0 + \beta_1 LTD + \beta_2 DR + \beta_3 ER + \beta_4 FL + \beta_5 AT + \beta_6 LR + \beta_7 BE + \beta_8 CR + \beta_9 SIZE + \beta_{10} AGE + \varepsilon_{it} \quad (1)$$

$$ROE_{it} = \beta_0 + \beta_1 LTD + \beta_2 DR + \beta_3 ER + \beta_4 FL + \beta_5 AT + \beta_6 LR + \beta_7 BE + \beta_8 CR + \beta_9 SIZE + \beta_{10} AGE + \varepsilon_{it} \quad (2)$$

$$TQ_{it} = \beta_0 + \beta_1 LTD + \beta_2 DR + \beta_3 ER + \beta_4 FL + \beta_5 AT + \beta_6 LR + \beta_7 BE + \beta_8 CR + \beta_9 SIZE + \beta_{10} AGE + \varepsilon_{it} \quad (3)$$

Where,

ROA= Return on Assets; ROE= Return on Equity;TQ= Tobin's Q; LTD= Long-term debt; DR= debt ratio; ER= equity ratio; FL= financial leverage; AT=Asset Tangibility; LR=LiquidityRisk; BE = Bank Efficiency; CR =Credit Risk; SIZE= Bank Size; AGE= Bank Age; ε_{it} = idiosyncratic shocks/ error term.

The first equation (1) is testing the relationship between capital structure variables and return on assets. The second equation (2) is testing the relationship between capital structure variables and return on equity. The third equation (3) is testing the relationship between capital structure variables and Tobin's Q.

IV. ANALYSIS AND FINDINGS

4.1Summary Statistics

In Table 2., the data collected for this study are statistically summarized and described. Based on the Table below, the return on assets (ROA) of GCC Islamic banks which showed a mean of 2.86 percent indicates that the banks averagely generate 2.86 percent profitability from the efficient use of their assets to generate income. While the minimum ROA is -27.6 percent, the maximum ROA generated is 34.84 percent. The low standard deviation of 5.34 percent indicates that there is shorter difference in ROA among the banks.

Table 2: Descriptive Statistics of Listed Islamic banks in GCC Countries

	Obs	Mean	Std. Dev.	Min.	Max.	Skewness	Kurtosis	Jarque-Bera
ROA	294	2.8608	5.3488	-27.600	34.840	-1.1831	17.314	2578.37
ROE	294	10.226	15.294	-47.620	69.920	-0.8335	6.8666	217.178
TQ	294	1.0911	0.2259	0.2007	1.9976	0.6858	5.6626	109.889
LTD	294	6.8728	9.2512	0	48.950	2.2159	7.6895	509.994
DR	294	71.305	27.670	1.1395	94.411	-1.6410	4.1635	148.538
FL	294	20.243	18.084	1.1668	91.740	1.9878	7.0656	396.101
ER	294	18.653	15.081	0.0909	97.060	2.7264	12.162	1392.63
AT	294	18.810	14.841	4.1371	97.065	2.8651	12.691	1552.68
LR	294	8.9805	13.317	0.0345	96.110	4.1276	23.297	5881.30
BE	294	63.065	29.025	0.8189	99.910	-0.9831	2.8021	47.8331
CR	294	4.8762	4.3384	0.0332	25.821	1.2195	4.4907	100.094
SIZE	294	15.790	1.6143	12.147	21.661	0.9765	5.4881	122.558
AGE	294	2.8623	0.9194	0	4.1109	-0.8287	2.6215	35.4012

Return on equity (ROE) showed a mean of 10.23 percent, a minimum of -47.62 percent and a maximum of 69.92 percent. This is an indication that the Islamic banks averagely generate 10.23 percent profitability from the efficient use of their equity to generate income. The low standard deviation of 15.29 percent indicates that there is shorter difference in ROE among the banks. On the other hand, Tobin's Q (TQ) showed a mean of 1.09, a minimum of 0.20 and a maximum of 1.99 percent. This implies that on average of 1.09, the market value of assets of the Islamic banks is greater than the book value of their assets. Also, there is very little difference in TOBINSQ among the banks due to low standard deviation of 0.23.

Regarding long-term debt (LTD), it showed a mean of 6.87 percent, a minimum of 0 percent and a maximum of 48.95 percent. This implies that on average, only 6.87 percent of the capital structure of the Islamic banks is financed through fixed liabilities. The standard deviation of 9.25 percent showed that there is low variation in LTD among the Islamic banks. Meanwhile, debt ratio (DR) showed a mean of 71.31 percent, a minimum of 1.14 percent and a maximum of 94.41 percent. This is an indication that on average, 71.31 percent of the capital structure of the Islamic banks is highly financed through debt. Also, there is little difference in DR among the Islamic banks due to low standard deviation of 27.67 percent.

Financial leverage (FL) showed a mean of 20.43 percent, a minimum of 1.17 percent and a maximum of 91.74 percent. This indicates that on average, 20.43 percent of the assets of the Islamic banks were financed through debt and other obligations. The low standard deviation of 18.08 percent shows that there is shorter difference in FL among the Islamic banks. On the other hand, equity ratio (ER) showed a mean of 18.65 percent, a minimum of 0.09 percent and a maximum of 97.06 percent. This infers that on average, 18.65 percent of the assets of the Islamic banks were financed through shareholders equity. The standard deviation is 15.08 percent, indicating a shorter variation in ER among the Islamic banks.

Asset tangibility (AT) showed a mean of 18.81 percent, a minimum of 4.14 percent and a maximum of 97.07 percent. This implies that 18.81 percent of the assets of the Islamic banks was averagely invested on fixed assets. The standard deviation of 14.84 percent showed a low variation in AT among the Islamic banks. Liquidity risk (LR) showed a mean of 8.98 percent, a minimum of 0.04 percent and a maximum of 96.11 percent. This is an indication that the Islamic banks are strongly liquid on an average of 8.98 percent. The standard deviation of 13.32 percent showed a low variation in LR among the Islamic banks. In addition, bank efficiency (BE) showed a mean of 63.07 percent, a minimum of 0.82 percent and a maximum of 99.9 percent. This suggests that the Islamic banks efficiently and strongly manage their operating expenses over their income on an average of 63.07 percent. The low standard deviation of 29.02 percent indicates little difference in BE among the Islamic banks.

Moreover, credit risk (CR) showed a mean of 4.88 percent, a minimum of 0.03 percent and a maximum of 25.82 percent. This implies that the degree of risk of loss incurred by the Islamic banks from non-performing loans is on an average of 4.88 percent. A low standard deviation of 4.34 was achieved, which implies low variation in CR among the Islamic banks. Furthermore, bank size (SIZE) showed a mean of 15.79 percent, a minimum of 12.15 percent and a maximum of 21.66 percent. This infers that the average size of the Islamic banks is 15.79 percent higher than their total assets. The standard deviation of 1.61 percentindicates low difference in SIZE among the Islamic banks. Finally, bank age (AGE) showed a mean of 2.86 years, a minimum of 0 year and a maximum of 4.11 years. This indicates that the average number of years of operation of the

Islamic banks used in this study is 2.86 years. The standard deviation of 0.92 year implies low difference in AGE among the Islamic banks.

4.2Correlation Matrix

The results of the correlation in Table 5.2 below shows that the coefficients of the variables are not greater than the threshold of 0.87 or 0.97 based on the suggestion of Field (2009). Therefore, there is no presence of multicollinearity in including these variables in each of the models. The results indicate a negative significant correlation between long-term debt (LTD) and Tobin's q (TQ). This implies that decrease in long-term debt leads to higher market value since low level of long-term debt suggests low level of risk on debt obligations which then strengthen market value (Abor, 2005; Mesquita & Lara, 2003; Ronoh & Ntoiti, 2015).Furthermore, debt ratio has a positive significant correlation with return on assets (ROA) and Tobin's q,but a negative significant correlation with return on equity (ROE). This indicates that the higher the debt ratio the higher the ROA and TOBINSQ but the higher the debt ratio the lower the ROE, because the higher value of debt ratio explains the higher degree of financial leverage of the banks which also leads to their higher level of financial risk (Kuria & Omboi, 2015; Norvaisiene, 2012; Zeitun & Saleh, 2015).

Moreover, financial leverage has a negative significant correlation with ROA but a positive significant correlation with TOBINSQ, implying that the lower the financial leverage the lower the ROA (Abubakar & Ahmadu, 2015; Kuria & Omboi, 2015; Meero, 2015), and the higher the financial leverage the higher the market value (Berger & Bonaccorsi, 2006; Njeri & Kagiri, 2013; Mireku, Mensah, & Ogoe, 2014). On the other hand, equity ratio has a negative significant correlation with ROA and positive significant correlation with Tobin's q, meaning that decrease in equity ratio of the banks will increase return on assets and while an increase in equity ratio of the banks will increase their market value, since higher equity ratio explains higher shareholder equity and longer better solvency position of the banks (Hoffmann, 2010; Mireku et al., 2014).

Table 3: Pearson Correlation Matrix for GCC Countries Islamic banks

	ROA	ROE	TQ	LTD	DR	FL	ER	AT	LR	BE	CR	Size	Age
ROA	1.000												
ROE	0.659	1.000											
TQ	0.050	0.119	1.000										
LTD	-0.191	-0.207	-0.069	1.000									
DR	0.042	-0.086	0.002	-0.049	1.000								
FL	-0.044	-0.151	0.048	0.304	-0.254	1.000							
ER	-0.018	-0.188	0.032	0.259	0.171	0.492	1.000						
AT	-0.102	-0.139	0.087	0.263	-0.349	0.773	0.581	1.000					
LR	-0.161	-0.244	-0.137	-0.007	0.016	0.178	0.126	0.066	1.000				
BE	-0.207	-0.381	-0.377	0.074	0.240	0.044	0.227	-0.156	0.207	1.000			
CR	0.024	-0.196	-0.219	0.058	0.127	-0.013	0.095	-0.167	0.593	0.465	1.000		
Size	0.162	0.364	0.052	-0.079	-0.074	-0.397	-0.725	-0.420	-0.201	-0.352	-0.218	1.000	
Age	0.102	0.194	-0.039	-0.222	0.349	-0.491	-0.120	-0.573	0.110	0.170	0.273	0.244	1.000

4.3Panel Regression Analyses

Before testing the panel regression models, three tests were carried out on the models. These tests include the variance inflation factor to evident the absence of multicollinearity in the models; the Wooldridge test to evident the absence of autocorrelation in the panel data model; and the serial correlation to evident the absence of heteroskedasticity in the model. Carrying out these tests guarantees getting better and more accurate results and meet the Best Linear Unbiased Estimator (BLUE) assumptions. Based on the VIF test, the results attested that multicollinearity is not present in the model since the coefficient of VIF is less than 10 and the mean is less than 5 (Hair et al., 2006; Studenmund, 1997). Thus, the absence of multicollinearity in the model was confirmed.The Breusch-Pagan / Cook-Weisberg test for heteroskedasticity showed that the Chi-square probability was found to be 0.0000 in all the models. This implies that heteroskedasticity is present in the models. Also. the result of serial correlation showed that the probability of F-statistic being more than the critical value is 3.83percent (Prob > F = 0.0383) in model 1 (where ROA is dependent variable), 0.02percent (Prob > F = 0.0002) in model 2 (where ROE is dependent variable), and 1.49percent (Prob > F = 0.0149) in model 3 (where Tobin's q is dependent variable), which indicate all are significant. Therefore, the assumption of no autocorrelation is rejected. Hence, the model was confirmed to have autocorrelation. The presence of serial correlation indicates that the variables in the model violate the assumptions of the regression (Hair, Black, Babib, & Anderson, 2007).

Thus, in line with the suggestion of Asteriou and Hall (2007) that to treat the problem of heteroskedasticity and, a model should robust and therefore the robust model should then be reported. The advantage of using robust standard error is that it controls for both heteroscedasticity and serial correlation which can pose problems in panel data (Lei, 2006). Therefore, all models are estimated with robust standard error to solve the heteroscedasticity and serial correlation problems.

The result of the Hausman test confirmed the use of fixed effects method for the datasets of this study, thus, Table 4 showed the results of the fixed effects on each model and give full details on how the focus variables and control variables which are known as predictors affect performance of the banks.

Table 4: Fixed Effect Regression results for the Models

		Model 1		Model 2	Model 3
		ROA		**ROE**	**TOBINSQ**
LTD		-0.3623***		-0.0629***	-0.6962*
		(-4.33)		(-8.44)	(-8.84)
DR		-0.1557**		-0.0029	-0.0067
		(-2.56)		(-1.46)	(-1.27)
FL		0.1883***		-0.0483***	0.2065
		(2.88)		(-5.02)	(1.23)
ER		0.0206***		-0.0810***	-0.0267***
		(4.31)		(-11.17)	(-5.42)
AT		-0.0284***		0.0964***	0.0270***
		(-6.65)		(10.77)	(6.00)
LR		0.5649***		-0.0084*	-0.0043***
		(5.28)		(-1.74)	(-4.74)
BE		0.2414***		-0.9415***	-0.0040
		(3.62)		(-3.49)	(-1.06)
CR		-0.0058**		0.0003	0.0245**
		(-2.71)		(0.64)	(2.33)
SIZE		0.3840		-0.0007*	-0.1950***
		(0.61)		(-2.00)	(-6.42)
AGE		-0.3864		-0.1541	-0.0666
		(1.53)		(-0.71)	(-0.43)
Constant		1.9357**		6.7677***	4.0438***
		(2.52)		(5.60)	(6.66)
Observations		294		294	294
R-sq: within =		0.6670		0.5631	0.5116
between =		0.5613		0.1155	0.5923
overall =		0.6506		0.2738	0.5865
F-Statistic		37.41		93567.75	813.84
P-Value (F-Statistic)		0.0000		0.0000	0.0000

Note: *, ** and *** indicate statistical significance at the 10 %, 5 % and 1 % level respectively.

Table 4 above depicts the fixed regression results to examine the effect of determinants of capital structure of Islamic banks in GCC countries on their performance. Three models were regressed with three different dependent variables (namely ROA, ROE and TOBINSQ). The results of the regression showed overall model fit for the F statistics of 0.0000 in all the models regressed. Model 1 (with ROA as dependent variable) showed an overall R-square of 0.6506 which indicates that the independent variables and control variables employed in this study explained 65.06percent variation in ROA of the Islamic banks. Model 2 (with ROE as

dependent variable) showed an overall R-square of 0.2738 which indicates that the independent variables and control variables employed in this study explained 27.38percent variation in ROE of the Islamic banks. However, Model 3(with TOBINSQ as dependent variable) showed an overall R-square of 0.5865 which indicates that the independent variables and control variables employed in this study explained 58.65percent variation in TOBINSQ of the Islamic banks.

The results also show that long-term debt (LTD) has a significant negative relationship with ROA (at b= -0.3623, p<0.01), ROE (at b= -0.0629, p<0.01), and TOBINSQ (at b= -0.6962, p<0.10). This implies that with1percent decrease in long-term debt of the Islamic banks both their ROA and ROE will increase by 36.23percent and 6.29percent, respectively. However,10percent decrease in their long-term debt will increase their TOBINSQ by 69.62percent. This finding is line with the evidence from previous studies (e.g., Abor, 2005; Kuria & Omboi, 2015; Kyereboah- & Coleman, 2007; Mesquita & Lara, 2003; Ronoh&Ntoiti, 2015) that long-term debt and bank performance are significantly and negatively related.In addition, debt ratio (DR) has a significant negative relationship with ROA (at b= -0.1557, p<0.05), butinsignificant with ROE and TOBINSQ. This indicates that ROA of the Islamic banks will increase by 15.57percent when their debt ratio decreases by 5percent. The finding is consistent with the findings of (Kuria & Omboi, 2015) and Van Horn and Wackowicz (2003) that found a negative significant relationship between debit ratio and bank performance. Also, in line with the findings of Abubakar and Ahmadu (2015), Kipesha and Moshi (2014) and Meero (2015)that found insignificant relationship between debit ratio and bank performance.

Furthermore, financial leverage (FL) has a positive significant relationship with ROA (at b= 0.1883, p<0.01), a negative relationship with ROE (at b= -0.0483, p<0.01), but insignificant with TOBINSQ. This implies that 1percent increase in financial leverage will increase ROA of the Islamic banks by 18.83percent; which is in line with past studies (e.g., Berger & Bonaccorsi, 2006; Kuria & Omboi, 2015; Lim, 2015; Njeri & Kagiri, 2013; Opoku et al., 2013) that found positive relationship between financial leverage and bank performance. However, 1percent decrease in financial leverage will increase ROE of the Islamic banks by 4.83percent; which is consistent with previous studies (e.g., Abubakar & Ahmadu, 2015, Kipesha & Moshi, 2014; Kuria & Omboi, 2015; Meero, 2015; Sagara, 2015).Moreover, equity ratio (ER) has a positive significant relationship with ROA (at b= 0.0206, p<0.01), and negative significant relationship with ROE (at b= -0.0810, p<0.01) and TOBINSQ (at b= -0.0267, p<0.01). This indicates that 1percent increase in equity ratio will increase ROA of the Islamic banks by 2.06percent, which is consistent with some past studies (e.g., Al-Kayed et al., 2014; Tdsh&Pdnk, 2015) that found positive relationship between equity ratio and ROA. However, this finding also indicates that 1percent decrease in equity ratio will increase ROE by 8.10percent, and 1percent decrease in equity ratio will increase TOBINSQ by 2.67percent. This is in line with the findings of past studies (e.g., Berger, 1995; Pastoryet al., 2013).

Based on the control variables, asset tangibility (AT) has a negative significant relationship with ROA (at b= -0.0284, p<0.01), and positive significant relationship with ROE (at b= 0.0964, p<0.01) and TOBINSQ (at b= 0.0270, p<0.01). This indicates that with 1percent decrease in asset tangibility, ROA will increase by 2.84percent. This is in line with the study of Anarfo, Ebenezer, and Bugri (2015). Also, 1percent increase in asset tangibility will increase ROE by 9.64percent and TOBINSQ by 2.70percent. This finding is consistent with past studies (Al-Shubiri, 2009; Jensen & Meckling, 1976). Liquidity risk (LR) has a positive significant relationship with ROA (at b= 0.5649, p<0.01), negative significant relationship with ROE (at b= -0.0084, p<0.10) and TOBINSQ (at b= -0.0043, p<0.01).This implies that 1percent increase in liquidity risk will increase ROA by 56.49percent, which is consistent with past studies (Al-Kayed et al., 2014; Barth et al., 2003; Molyneux & Thornton 1992). Meanwhile, 1percent decrease in liquidity risk will increase ROE by 0.84percent and TOBINSQ by 0.43percent, which is in line with the findings of past studies (Bourke, 1989; Kosmidouet al, 2005). Bank efficiency (BE) has a positive significant relationship between ROA (at b= 0.2414, p<0.01), negative significant relationship between ROE (at b= -0.9415, p<0.01), but insignificant with TOBINSQ. This indicates that 1percent increase in bank efficiency will increase ROA of the Islamic bank by 24.14percent. This is consistent with the study of Rao and Lakew (2012) who found a positive relationship between bank efficiency and bank performance. Meanwhile, 1percent decrease in bank efficiency will increase ROE of the Islamic bank by 94.15percent. This is also consistent with the study of Al-Kayed et al., (2014) which found a negative significant relationship between bank efficiency and bank performance.

On the other hand, credit risk (CR) has a negative significant relationship with ROA (at b= -0.0058, p<0.05), positive significant relationship with TOBINSQ (at b= 0.0245, p<0.05), but insignificant with ROE.This is an indication that 5percent decrease in credit risk will increase ROA by 0.58percent, which is consistent with past studies (e.g., Chiaramonte & Casu, 2016; Miller &Noulas, 1997). Also, 5percent increase in credit risk will increase TOBINSQ by 2.45percent, which is also consistent with past studies (e.g., Hakim & Neami, 2001; Nabilah&Rashidah, 2013).Bank size (SIZE) has a negative significant relationship with ROE (at b= -0.0007, p<0.10) and TOBINSQ (at b= -0.1950, p<0.01), but insignificant with ROA. This implies that10percent decrease in bank size will increase ROE by 0.07percent, while 1percent decrease in bank size will

increase TOBINSQ by 19.50percent. However, Bank Age (AGE) is insignificant with all the dependent variables.

V. CONCLUSION

There have been extensive studies on the impact of capital structure on bank performance. However, most of these studies are carried out in developed countries and on conventional banks. This study is carried out among developing countries and focused on Islamic banks. Thus, this study examined the impact of capital structure on Islamic bank performance in GCC countries. ROA, ROE and Tobin's Q are used as proxies for Islamic bank performance to get better understanding of the impact of capital structure on bank performance. On the part of capital structure, this study reflects on numerous past studies on capital structure which revealed long-term debt, debt ratio, financial leverage and equity ratio as the proxies for capital structure.

A total data of 25 public listed Islamic banks for the period 2005 to 2017 from five GCC countries (namely Saudi Arabia, Qatar, Kuwait, United Arab Emirate, Bahrain) were considered for this study. Based on the analysis, long-term debt (LTD) was significantly and negatively related with Islamic bank performance. The finding is consistent with most previous studies on capital structure and bank performance (e.g., Kuria & Omboi, 2015; Mesquita & Lara, 2003; Ronoh & Ntoiti, 2015). Debt ratio was significantly and negatively related with ROA of the Islamic banks. Thefinding was consistent with the study of Kuria and Omboi (2015) and Van Horn and Wackowicz (2003). Financial leverage was significantly and positively related with ROA, which is in line with past studies (e.g., Berger & Bonaccorsi, 2006; Kuria & Omboi, 2015; Opoku et al., 2013). Also, financial leverage was significantly and negatively related with ROE, which was also in line with previous studies (e.g., Kuria & Omboi, 2015; Meero, 2015; Sagara, 2015). Equity ratio was significantly and positively related with ROA of the Islamic banks, which is consistent with the study of Al-Kayed et al. (2014)and Tdsh and Pdnk (2015). Also, equity ratio was significantly and negatively related with ROE and TOBINSQ of the Islamic banks, which is consistent with the study of (Berger, 1995;Pastory, Marobhe, and Kaaya, 2013).

The findings of this study imply that managers of this Islamic banks need to ensure that long-term debt is keep at a low amount to increase their bank performance, because the lower the long-term debt the higher the bank performance. In addition, the Islamic banks need to maintain their pattern of capital structure by ignoring the concept of optimal capital structure since their pattern of capital structure have favorable influence on their overall performance. These banks need to maintain the pattern of using less debt and ignore the benefits of using their debt portion of the capital structure. These banks also need to know that their financing decision cannot provide a simple way for the optimal capital structure or the tradeoff between debt and equity since there are numerous items in the financial statement of the banks and each item has specific order in terms of utilization. Also, this finding implies that Islamic banks that are more profitable with higher amount of cash flows can use very little amount of debt to finance its projects as compare to those with the lower value of generated funds of cash flows and follow the hierarchy of financing sources by preferring the level of internal financing before the value of debt financing. Islamic banks need to maintain high financial leverage to achieve high efficiency in terms of profitability or maintain low financial leverage to reduce risk. Also, the Islamic banks with higher leverage can achieve higher level of financial rewards in the form of profitability, which could come through tax savings, or they incur more cost of debt such as interest, which reduces profitability. These banks also need to maintain higher equity ratio or ownership as it will provide more durability and strengthen their financial position and their ability to deal with both liquid assets and credit risk.

This study focuses on only Islamic banks in GCC countries, however, due to the data paucity of unlisted Islamic banks in GCC countries, the study uses only the Islamic banks that are listed on the stock exchange of each GCC country. Therefore, future research can examine both listed and unlisted Islamic banks in GCC region to further strengthen the findings of this study.

REFERENCES:

[1]. Abor, J. (2005). The effect of capital structure on profitability: an empirical analysis of listed firms in Ghana. The Journal of Risk Finance, 6(5), 438–445.

[2]. Abubakar&, Ahmadu. (2015).Relationship Between Financial Leverage and Financial Performance of Deposit Money Banks in Nigeria. International Journal of Economics, Commerce and Management United Kingdom, 3(10), 759-778

[3]. Al-Kayed, L. T., Mohd Zain, S. S. R., & Duasa, J. (2014). The relationship between capital structure and performance of Islamic banks. Journal of Islamic Accounting and Business Research, 5(2), 158–181.

[4]. Al-Shubiri, F. N. (2011). Capital Structure and Market Power: Evidence from Jordanian Banks. Managing Global Transitions, 9(3), 289–310.

[5]. Amidu, M. (2007). Article information :Determinants of capital structure of banks in Ghana: an empirical approach. Baltic Journal of Management, 2(1), 67–79.

[6]. Anarfo, Ebenezer, & Bugri. (2015). Capital Structure and Bank Performance: Evidence From Sub-Sahara Africa. European Journal of Accounting Auditing and Fianace Research, 3(3), 1–20.

[7]. Barclay, M. ., & Smith, J. (2012). Optimal Bank Capital. Economic Journal, 123, 1–37.

[8]. Basu, R., Prasad, A., & Rodriguez, S. (2015). Monetary Operations and Islamic Banking in the GCC : Challenges and Options.Working Paper.

[9].   Beattie, V., Goodacre, A., & Thomson, and S. J. (2006). Corporate Financing Decisions: UK Survey Evidence. Journal of Business Finance & Accounting, 33(9/10), 1402–1434.
[10]. Berger, A(1995). The relationship between capital and earnings in banking. Journal OfMoney, Credit and Banking, 27(2), 432–456.
[11]. Berger, A. N., & Bonaccorsi, di P. E. (2006). Capital Structure and Firm Performance: A New Approach to Testing Pecking Order Theory and An Application to Banking Industry. Journal of Banking and Finance, 30(4), 1065–1102.
[12]. Brigham, F. E., & Ehrhardt, C. M. (2003). Corporate finance: A focused approach. New York: Thomson South-Western.
[13]. Chiaramonte, L., & Casu, B. (2016). Regional clinical registry data show increased incidence of cutaneous melanoma in Cape Town. South African Medical Journal.4(2), 138-161
[14]. De Wet, J. H. v. H. (2006). Determining the optimal capital structure : a practical contemporary approach. Research Journal of the School of Accounting Sciences, 14(2), 1–16.
[15]. Diamond, D.W, & Dybvig, P(1983). Bank runs, deposit insurance and liquidity. Journal of Political Economy, 91(8), 401–419.
[16]. Diamond, D. (1984). Financial intermediation and delegated monitoring. Review of Economic Studies, 51, 393–414.
[17]. Firer, S., & Williams, S. M. (2003). Intellectual capital and traditional measures of corporate performance. Journal of Intellectual Capital, 4(3), 348–360.
[18]. Gitman, L., & Zutter, C. J. (2010). Principles of managerial finance (13th ed.) New York: Prentice Hall.
[19]. Hair, J., Black, W., Babib, B., & Anderson, R. (2007). Multivariate Dara Analysis.
[20]. Hakim, S., & Neami, S. (2001). Performance and Credit Risk in Banking: A Comparative Study of Egypt and Lebanon.Working Paper Series, Working Paper.
[21]. Hassan, M., Farhat, J., & Al-zu'bi, B. (2003). Dividend signaling hypothesis and short term. Islamic Economic Studies, 11(1), 1–30.
[22]. Hoffmann, P. S. (2010). Capital Structure and Performance in the US Banking Industry.
[23]. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics. 3(4), 305–360.
[24]. Karadeniz, E., Kandir, S. Y., Balcilar, M., & Onal, Y. B. (2009). Determinants of Capital Structure: Evidence from Turkish Lodging Companies. International Journal of Contemporary Hospitality Management, 21(5), 594–609.
[25]. Kipesha, E., & Moshi, J. (2014). Capital Structure and Firm Performance: Evidences from Commercial Banks in Tanzania. Research Journal of Finance and Accounting, 5(14), 168-178.
[26]. Kuria, J., & Omboi, B. (2015).Relationship Between the Capital Structure and the Financial Performance of Investment and Banking Firms Listed at the Nairobi Securities Exchange in Kenya. Prime Journal of Business Administration and Management, 5(11), 1983-1991.
[27]. Kyereboah-, A., & Coleman. (2007). Determinants of capital structure: An empirical study of firms in manufacturing industry of Pakistan". The Journal of Risk Finance, 8(2), 56–71.
[28]. Liang, J., Li, L. F., & Song, H.-S. (2014). An explanation of capital structure of China's listed property firms. Property Management, 32(1), 4–15.
[29]. Lim, E. (2015). Capital Structure and Profitability of Selected Universal Banks in the Philippines.9th Global Business Conference, 24-28.
[30]. Meero, A.(2015). The Relationship between Capital Structure and Performance in Gulf Countries Banks: A Comparative Study between Islamic Banks and Conventional Banks. International Journal of Economics and Finance, 7(12), 140–154.
[31]. Meero, A. (2016). Determinants of Capital Structure in Bahrain Stock Market. International Finance and Banking, 3(2), 177.
[32]. Mesquita, J. M. C., & Lara, J. E. (2003). Capital structure and profitability: the Brazilian case working paper. Academy of Business and Administration Sciences Conference, Vancouver, July 11-13.
[33]. Milles, D., Yang, J., & G., M. (2012). Débats économiques et financiers N°12 Does the capital structure affect banks' profitability? Pre-and post financial crisis evidence from significant banks in France.
[34]. Mireku, K., Mensah, S., & Ogoe, E. (2014). The Relationship between Capital Structure Measures and Financial Performance: Evidence from Ghana. 9(6), 151–160.
[35]. Myers, S. C., & Majluf, N. (1984). Corporate financing and investment decisions when firms have information investors do not have. Journal of Financial Economics, 13, 187–221.
[36]. Nirajini, A., & Priya, K. (2013). Impact of Capital Structure on Financial Performance of the Listed Trading Companies in Sri Lanka. International Journal of Scientifc and Research Publications, 3(5), 1–9.
[37]. Njeri, M., & Kagiri, A. (2013). Effect of Capital Structure on Financial Performance of BankingInstitutions Listed in Nairobi Securities Exchange. International Journal of Science and Research, 14(7), 2319–7064.
[38]. Norvaisiene, R. (2012). The Impact of Capital Structure on the Performance Efficiency of Baltic Listed Companies, Engineering Economics23(5), 505–516.
[39]. Pandey, I. M. (2009), Financial Management: Capital Structure Planning and Policy pp 332-333
[40]. Pastory, D., Marobhe, M., & Kaaya, I. (2013). The Relationship between Capital Structure and Commercial Bank Performance: A Panel Data Analysis. International Journal of Financial Economics, 1(1), 33–41.
[41]. Ronoh, C., & Ntoiti, J. (2015). Effect of Capital Structure on Financial Performance of Listed Commercial Banks In Kenya. A Case Study of Kenya Commercial Bank Limited.The Strategic Journal of iusiness & Change, 2(72), 227-233
[42]. Saad, N. M. (2010). Corporate Governance Compliance and the Effects to Capital Structure in Malaysia. International Journal of Economics and Finance, 2(1), 105–111.
[43]. Sagara, S. (2015). The Analysis of Capital Structure on Financial Performance Using Capital, Assets, Earnings, and Liquidity Ratios in Islamic Banks Listed on The Indonesia Stock Exchange in 2014. International Journal of Business, Economics and Law, 8(1), 53-60
[44]. Taani, K. (2013). Capital structure effects on banking performance: a case study of Jordan. International Journal of Economics Finance and Management Sciences, 1(5), 227–233.
[45]. Tdsh, D., & Pdnk, P. (2015). Relationship Between Capital Structure and Financial Performance of Licensed Commercial Banks In Sri Lanka. International Research Symposium Rajarata University of Sri Lanka.
[46]. Zeitun, R., & Saleh, A. S. (2015). Dynamic performance, financial leverage and financial crisis: evidence from GCC countries. EuroMed Journal of Business, 10(2), 147–162.