

# THE IMPACT OF CAPITAL STRUCTURE ON ISLAMIC BANKS PROFITABILITY: EVIDENCE FROM GCC COUNTRIES



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## ABSTRACT

*This paper aims to reveal the relationship between capital structure variables and the Profitability of Islamic banks. The examination has been performed using panel data for a sample of 05 Islamic banks operating in the Gulf Cooperation Council GCC countries (2010-2020). Capital Structure is measured by Deposit to Total Assets (DTA) and Equity to Total Assets (ETA) ratio. In contrast, return measures Profitability on Assets (ROA), Return on Equity (ROE), and Net Profit Margin (NPM). Data collected were analyzed by using E-Views10 software. The research results indicate that the ETA ratio has a positive and significant relationship with ROA. Whereas, The Deposit to Total Assets (DTA ratio) has no significant relationship with Return on asset (ROA). There is an insignificant relationship between (ETA ratio, DTA ratio) and the ROE ratio. Moreover, there is a significant solid effect between the ETA ratio and Net Profit Margin (NPM). At the same time, there is no significant relationship between the DTA ratio and Net Profit Margin (NPM). Therefore, the study can guide The GCC Islamic bank executives, The Shariah Supervisory Board, and the decision-makers in the GCC area to rely on specific capital structures for Islamic banks to improve their Profitability.*

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## INTRODUCTION

A business's ability to get the highest Profitability is fundamental for any organization, regardless of industry, which enhances the wealth of the company's owners or shareholders. As a result, the current market value of the firm's existing shares is used to calculate the wealth of its owners. As a result of this aim, the firm's management should make reasonable financing decisions about the optimal capital structure, which would reduce its cost of capital; The Islamic banking industry is one of them.

Islamic banks have a different capital structure; they adhere to Sharia law in their operations. The payment and receipt of Riba are among the many acts that Shariah forbids (interest); the banks use Shariah-compliant mechanisms or contracts that are not used by their conventional counterparts to raise and distribute funds more effectively. The Shariah law also mandates that Islamic banks share earnings and losses with their investors.

Few academics and researchers around Islamic Banking believe that capital structure and Profitability are linked positively (Al-Farisi & Hendrawan, 2011; Hafeez et al., 2018; Meero, 2015; Noreen, 2019). Yet, the Gulf Cooperation Council (GCC) countries are regions where the Islamic banking industry expanded.

Thus the main objective of this study is to check the impact of capital structure on the Profitability of Islamic listed banks in the Gulf Cooperation Council (GCC).

## Objectives

- To investigate "Capital Structure's "and Profitability's "research growth and progress.
- Reviewing the subject fields through various paper styles analysis was conducted on Start-up.
- To locate regional and structural contributions to Start-up research from around the world

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### **Importance of the Problem**

Due to the increasing economic weight of Islamic Banking as an alternative financial which gained a lot of attention from academics, research centers, and the government; the importance increases from this study about capital structure and Profitability on many levels, including:

- Students and researchers of current scientific phenomena can brush up on their skills by contemporary science phenomena.
- We have added new stats to our understanding of capital structure and Profitability in the GCC area Islamic banks.
- Evaluation of Islamic Banks of the GCC area performance.
- We are making the results of this investigation available to the public.

### **BACKGROUND**

The capital structure reflects the mix of Equity and debt in the banks. The optimal mix of Equity and debt for a business optimizes the firm's value while minimizing total capital costs, but this relies on the determinants.

Several studies have examined Islamic banks' capital structure and its determinants. The capital structure of banks is strongly linked to a wide range of variables, such as the bank size, tangibility and liquidity, dividend policy, the ratio of market-to-book, and Profitability.

Below, we shed light on these factors in the Islamic finance context based on capital structure theories. Then, we will focus on Profitability, which is the issue of our study.

### **Theories of Capital Structure in an Islamic View**

We will use the theoretical framework of trade-off theory, the agency cost theory, the asymmetry of information, and the pecking order theory, sequentially examining how the above approaches can be used to explain the financial structure of Islamic Banks. Contemporary financial theories note that conflicts of interest between stakeholders, bankruptcy costs, taxes, asymmetries of information and safety nets, transactions costs, and prudential regulation determine the level of capital in banks. However, this literature has focused, essentially, on Conventional Banks.

### **Static Trade-off Theory: Tax Savings versus Bankruptcy Expenses in an Islamic Setting**

When Modigliani and Miller (1963) revised their earlier work, they included tax benefits as a factor in determining a firm's capital structure. (Hailu, 2015). Static trade-off theory posits that the ideal financial structure results from a trade-off between tax savings from interest rate deductibility and predicted bankruptcy costs (Myers, 1984). By utilizing as much debt capital as feasible, (Modigliani & Miller, 1963) like to raise Profitability while also increasing company value. However, according to studies by Ricca, Jucá, and Junior (2021) and Berger, Herring, and Szego (1995), as debt grows, so does the likelihood of insolvency, raising the estimated expenses of running into financial trouble. Reveal the trade-off between tax benefits and bankruptcy costs specifies the optimal capital ratio of banks (Berger et al., 1995; Ricca et al., 2021).

Liabilities claim holders benefit from Islamic Banks' lower bankruptcy costs because of the increased percentage of tangible assets held by these institutions. As a result, Islamic banks' estimated insolvency costs should be lower than traditional banks. In addition, the collateralization of the credit portfolio decreases the bank's exposure to counterparty risk since it offers a security mechanism that allows Islamic Banks to limit their risk exposure owing to the involvement of investors in the actual economy as required by Islamic financing. According to trade-off theory, Islamic Banks should have a lower equity ratio (equity/asset) because of the reduced bankruptcy costs associated with Islamic Banks (Toumi et al., 2012).

### **Asymmetry of Information and Pecking Order Theory in an Islamic Context**

In contrast to the idea of static trade-offs, another hypothesis describes the capital structure of financial firms: the pecking order theory (Myers, 1984; Myers & Majluf, 1984). Companies prioritize their funding sources, preferring internally generated funds under this idea due to asymmetric information between insiders (managers or dominant shareholders and outside investors). Straight debt, convertible debt, and external Equity are preferred when internal resources are limited. The principles of Islamic finance lead in theory to the symmetry of information and complete transparency between the Islamic Bank and its stakeholders. In effect, an essential aspect of Islamic finance is that it requires transparency in transactions:

- Since Islam prohibits El Gharar.
- Maysir is banned, meaning that excessive risk-taking is not permitted (Islamic Banks closes the access to Speculation and the use of derivatives).
- The requirement for traceability means the tangibility of assets in contracts
- Respect for these principles should lead every stakeholder to recognize its moral responsibility vis-a`-vis of all other stakeholders. Moreover, the risk level should be lower for Islamic Banks than for Conventional Banks.

### **Cost Agency under the Islamic Setting**

According to (Jensen & Meckling, 1976) landmark study on agency costs, the separation of (shareholders, managers, and debt holders) in banks produces conflicts of interest between shareholders and managers. It also affects the capital structure of businesses. In the shareholders-managers dispute, agency costs arise from shareholders' incapacity to control managers' conduct (Grossman & Hart, 1982; Jensen & Meckling, 1976). The Islamic setting is one example of a unique legal and ethical system that prohibits managers from excessive perquisite consumption and other opportunistic behavior.

Shariah's principles prohibit excessive risk-taking and taking risks at the expense of the others parties. In the Islamic

context, two traditional agency relationships remain the shareholder-manager relationship and shareholders-liability claim holder relationship. The impossibility limits the possibilities of wealth transfers from shareholders to claim-holders for shareholders to engage in hazardous projects.

The Mudaraba contract transforms the traditional relationship between the bank and its depositors into a partnership entrepreneur-investor. PSIA in IBs mobilized the basis of the contract within the principle of profit sharing. The second one is between managers and the SAC. Two other essential agency relationships emerge in the Islamic context. The risk that the manager maximizes his interest (income, power, prestige etc.) at the expense of holders of PSIA should be below.

The mechanism of profit-sharing in investment accounts is also at the benefit of shareholders. To avoid massive withdrawal of funds due to poor performance on investment deposits, shareholders exert more control over managers. In addition, most IBs communicate on their SAC to affirm their compliance with the principles of Islam.

### Profitability of Banks

In numerous previous studies, a bank's Profitability is measured by Return on assets (ROA) or Return on Equity (ROE) or Net Profit Margin (NPM) (Hafeez et al., 2018; Hailu, 2015; Petria et al., 2015; Setyawati et al., 2017). In this study, ROA, ROE, and NPM are the dependent variables.

For a bank's management, ROA is important since it shows how well the bank can utilize its resources and investments to create profit (Bashir, 2001; Hassan, 2010).

Depending on the bank's management decisions and circumstances that cannot be controlled, such as economic development and government laws, ROA can vary widely among banks.

Because regulators think that ROA is a metric adequate for calculating a bank's efficiency and is an indication that a large equity multiplier is not affected, ROA is the most flattering statistic for assessing the Profitability of banks (Rivard & Thomas, 1997). To evaluate a company's Profitability from its assets, ROA is a suitable metric.

Every dollar sale's net profit (EAT) is calculated using the Net Profit Margin.

The net profit margin (NPM) is the percentage of each dollar of sales that remains after all costs and expenses have been deducted, including interest, taxes, and preferred stock dividends. (Mulyadi et al., 2020).

While (Alexandri, 2008) defines Net Profit Margin as "the ratio used to show a company's ability to generate net profits after tax deductions." According to (Sutrisno, 2009), NPM is: "The ability of the company to generate profits concerning sales achieved." If you want to calculate NPM, divide your net income (before taxes) by your net sales. Having the ability to cover non-operational and income tax expenses, as well as a more extraordinary ability to earn a net profit, is indicated by this ratio.

Furthermore, return on Equity (ROE) indicating how the effectiveness of the bank's management in the use of shareholder funds. ROE of banks affected by ROA and the level of financial leverage of banks (equity/assets). For financial intermediaries, ROA has values that tend to be lower than the ROE, so most banks use more financial leverage to increase ROE to be more competitive (Sufian, 2007).

## LITERATURE REVIEW

Capital structure's impact of on Profitability of the Islamic or conventional bank's has no incontestable evidence or academic consensus; some studies reported that capital structure has significant determinants, apart from the Profitability of banks (Al-Hunnayan, 2020; Goh et al., 2018; Güner, 2016; Jamilah Tawfeeq Al-Najdawi, 2019; Hirdinis, 2019).

In addition, other literature reported the influence of several different factors on banks' Profitability aside from capital structure. (Dietrich & Wanzenried, 2011; Haris et al., 2019; Jaara et al., 2021; Saona, 2016; Shawtari, 2018; Staikouras & Wood, 2004; Sufian & Habibullah, 2009; Sun et al., 2017; Yao et al., 2018).

Nonetheless, the relationship between capital structure and bank profitability has been extensively examined.

Several studies found a positive impact of Equity to asset ratio on Profitability (Staikouras & Wood, 2004) during 1994–1998 In European banking sector using Static regression, (Yao et al., 2018) period of 2010–2016 targeted the Pakistani banking sector, The Generalized Method of Moments (GMM) carried out, the same method used by (Haris et al., 2019) during 2010–2016 in the Pakistani banking sector and (Mostak Ahamed, 2017) in Indian Banking (1998–2014), this result remained positive but insignificant in (Al-Homaidi et al., 2018; Almaqtari et al., 2019) and negative impact on ROE, NIM, and NIR (Lee et al., 2015).

Existing many comparative studies between Islamic Banks and Conventional Banks (Al-Farisi & Hendrawan, 2011; Jaara et al., 2021; Meero, 2015; Noreen, 2019) have reported a positive effect of capital Structure on Return On Equity (ROE) and a negative Return On Assets (ROA).

Table 1. Synopsis of the Literature Review Islamic Banking Studying the Relationship Between Capital Structure and Bank Profitability

References	Area	Period	Methodology	Findings
(Jaara, 2020)	GCC Islamic Banks	2000-2018	Bivariate analysis and panel regression	89%, 85% of IB's and CS profitability influenced by bank size, market value, CR, cash to assets, GDP, GDP growth, and inflation
(Noreen, 2019)	Banks of Pakistan	2006-2016	A comparative study	ROA has a negative correlation with the capital structure of both conventional and Islamic banks, But ROE has a positive correlation.

(Meero,2015)	Gulf countries banks	2005-2014	A comparative study	ROA has a significant negative relationship with financial leverage and a positive relationship with Equity to assets ratio
(Al-Farisi and Hendrawan, 2011)	Indonesian banks	2002-2008	A comparative study	Bank's capital ratio has a negative effect on their profit efficiency. The negative impact happened to be higher for the Islamic bank
(Hafeez et al., 2018)	Asian country	2007-2016	Regression analysis	There is a significant and a positive relation EM and DR with ROA while ER has a negative and significant relation with ROA
(Al-Kayed et al., 2014)	Islamic Banking systems in 19 countries	2003-2008	Reverse Causality	profitability replies positively to an growth in Equity

Sources: Collected by the authors

**Critical and Research Gap**

We ensured that the covered literature relates to the research question and its objectives. We also covered the most relevant and essential theories of recognized experts in this field. Still, the literature most relevant to the representative sample of Islamic banks in the GCC was minimal, and the previous studies did not cover it sufficiently. This formed a spatial and empirical research gap that we tried to fill.

**METHOD: MATERIALS AND TOOLS**

**Design Research**

Upon the literature review, we build the following research model (Figure 1)

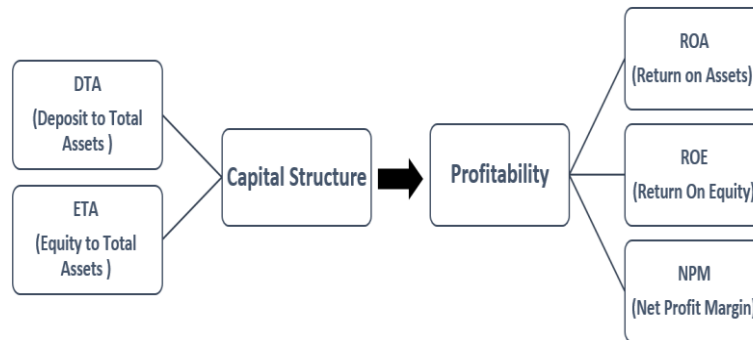


Figure 1. Conceptual Research Model

This study uses explanatory variables such as Deposit to Total Assets, Equity to Total Assets. The dependent variables are Return on Assets, Return on Equity, Net Profit Margin; the variables descriptions are given in Table 2.

Table 2. Description of Dependent and Independent Variables in the Model

N	Variable symbol	The name of influence factors	Measurement criteria
Dependent variables (Profitability)	ROA	Return on Assets	$ROA = \frac{NET\ INCOME}{AVERAGE\ TOTAL\ ASSET}$
	ROE	Return On Equity	$ROE = \frac{NET\ INCOME}{SHAREHOLDER\ EQUITY}$
	NPM	Net Profit Margin	$NPM = \frac{NET\ INCOME}{revenue}$
independent variables (Capital Structure)	DTA	Deposit to Total Assets	$DTA = \frac{TOTAL\ DEPOSITS}{TOTAL\ ASSETS}$
	ETA	Equity to Total Assets	$ETA = \frac{TOTAL\ EQUITY}{TOTAL\ ASSETS}$

Sources: Elaborated by the authors

**State Hypotheses According to Research Design**

The authors adopt the following hypotheses for the study model:

H1: There is a significant impact of Deposit to Total Assets ratio on Profitability of Islamic Banks in GCC countries

H2: There is a significant impact of Equity to Total Assets ratio on Profitability of Islamic Banks in GCC countries

Based on the hypotheses, this study has used the following model:

$$Y_{it} = \beta_0 + \beta_1 D_{it} + \epsilon_{it} \quad (1)$$

Where Y = dependent variable,  $\beta_0$  is intercept,  $\beta_1$  = slope, D = explanatory variable,  $\epsilon$  means error term, i signifies the cross-sectional element of the study, "t" represents the time series element in this study.

Equation 1: Return on asset

$$ROA_{it} = \beta_0 + \beta_1 DTA_{it} + \beta_2 ETA_{it} + \epsilon_{it} \quad (2)$$

Equation 2: Return on Equity

$$ROE_{it} = \beta_0 + \beta_1 DTA_{it} + \beta_2 ETA_{it} + \epsilon_{it} \quad (3)$$

Equation 3: Net Profit Margin

$$NPM_{it} = \beta_0 + \beta_1 DTA_{it} + \beta_2 ETA_{it} + \epsilon_{it} \quad (4)$$

Where:

ROA: Return on asset                      DTA: Deposit to Total Assets

ROE: Return on equity                      ETA: Equity to Total Assets

NPM; Net Profit Margin

### Data Collection and Processing

#### Instruments for Data Collection

The data for the study is extracted from the audited annual statements of Islamic Banks for 2010 to 2020. The study variables were collected from the yearly financial reports of the study sample banks.

#### Survey Population and Rationale

The study population consists of all Islamic banks operating in the Gulf Cooperation Council GCC countries. The study sample covers 05 Islamic banks from 05 Gulf countries: Saudi Arabia, UAE, Qatar, Bahrain, and Kuwait.

Table 3. The Sample of the Study

N	Country Name	Banks Name
1	Kingdom of Saudi Arabia.	Al Rajhi Bank
2	United Arab Emirates	Abu Dhabi Islamic Bank
3	Qatar	Qatar International Islamic Bank
4	Kuwait	Boubyan Bank
5	Bahrain	Al Salam Bank

Sources: Elaborated by the authors

### Statistical Procedure

For analyses of the data, statistical tools were used to compare and test the effect of independent variables on dependent variables. The data were analyzed using E-Views 10 software for the period from 2010 to 2020; the data is processed through the following steps:

- Step 1: Conduct a statistical description to understand the basic characteristics of the data collected.
- Step 2: Analyse the correlation between study variables.
- Step 3: Check the stationary of data by using the unit root test. As the data used in this study is panel data, W use the Levin, Lin, and Chu test to check the stationary level.
- Step 4: The panel regression analysis used three dependent and two independent variables. The Hausman test was used to determine on a fixed or random effect model estimates (Hausman, 1978).

### Statistical Description

The running (E-Views 10) software for data gives the following statistical results.

Table 4. Statistical Characteristics of Research Variables

	Mean	Median	Max	Min	Std. Dev.	N
<b>ROE</b>	0.106816	0.113600	0.224800	0.000300	0.055214	55
<b>ROA</b>	0.015886	0.015200	0.036600	4.00E-05	0.008060	55
<b>NPM</b>	0.380311	0.382700	0.594400	0.003600	0.141063	55
<b>ETA</b>	0.153691	0.146200	0.235600	0.107700	0.028915	55
<b>DTA</b>	0.795849	0.810600	0.850100	0.702100	0.042797	55

Source: Authors' Calculations using E-Views 10 software

As presented in table 4, The Return on equity (ROE) measure revealed how effective the bank is in generating a profit from shareholders' Equity. The descriptive statistics show the arithmetic mean of Return On Equity ratio (ROE) estimated at (10.68%), with a maximum value of (22.48%) and a minimum value of (0.03%), with a standard deviation of around (5.52%).

Similarly, ROA (Return on Assets) ratio shows the Profitability of using the assets. The high ratio indicates the efficient use of assets to generate more profit. The mean ROA (Return on Assets) of the sample banks in the study period was 1,58%, with a minimum score of 0.004% and a maximum score of 3,66%. The value of the Return on Assets ratio deviates from its mean with a standard deviation of 0.80%.

The Net profit margin ratio (NPM) shows how much of each dollar in revenues becomes profit. The mean Net Profit Margin ratio of the sample banks in the study period was 38.03 %. It reveals that profit represents on average nearly 38.03 % of the revenues of Islamic banks. The highest Net profit margin ratio for in a particular year was 59.44 %. In the same way, the minimum ratio of sample banks in a year was 0.36%.

The equity to Total Assets (ETA) ratio used as a capital structure measure to examine the impact of Equity on the Profitability of Islamic banks. The mean of (ETA) ratio of the sample banks in the study period was 15.36%. It reveals that total Equity represents nearly 15.36% of assets of Islamic banks. The highest Equity to Total Assets ratio for a bank in a particular year was 23.56 %, and in the same way, the minimum ratio for a bank in a year was 10.77%. The (ETA) ratio is very low. This indicates that Islamic banks rely on financing from external sources, especially customer deposits, to finance their assets. The value of the equity to total assets ratio deviates from its mean by a standard deviation of 2.89%.

Furthermore, the deposit to asset ratio (DTA) is used as a second measure of capital structure. This ratio shows the contribution percentage of customers' deposits to total assets. The high rate indicates the increased ability to finance its assets. The mean deposit to asset ratio of the sampled banks in the study period was 79.58%. It shows that deposit represents nearly 79.58% of Islamic banks' capital in the sample study. The highest deposit to asset ratio for Islamic banks in a particular year was 85.01%, and the minimum ratio for banks in a year was 70.21%. The value of the deposit to asset ratio deviates from its mean with a standard deviation of 4.27%.

**Correlation Analysis**

Table 5. Below shows the correlation matrix of capital structure variables and Profitability variables:

Table 5. Result of Correlation Analysis

Correlation	ROA	ROE	NPM	ETA	DTA
ROA	1.000000				
ROE	0.945461 0.0000*	1.000000			
NPM	0.769697 0.0000*	0.844022 0.0000*	1.000000		
ETA	-0.30548 0.0233*	-0.021879 0.8740	0.127181 0.3548	1.000000	
DTA	0.366406 0.0059	0.207352 0.1288	0.106516 0.4389	-0.606764 0.0000*	1.000000

Note.\* Significant at 5% level

Source: Authors' Calculations using E-Views 10 software

The correlation method checks the relationship between two variables; carrying out a correlation test determines whether collinearity exists among the explanatory variables used in the work because it can distort the accurate picture of the relationship between the dependent and explanatory variables.

Table (5) shows the results of the Correlation Analysis test between the study variables.

- There is a weak negative correlation between Equity to total assets ratio ETA with ROA (-0.30) with a significance level of 5% and a weak negative correlation with ROE (-0.02), and a weak positive correlation (0.12) with NPM.
- There is a weak positive correlation between the ratio of deposits to total assets DTA with ROA (0.36), ROE(0.20), NPM (0.10).

**Panel Unit Root Test**

To check whether data series are stationary at level, we applied the summary unit root test given by Levin et al. (2002). ). The results are presented in Table 6

Table 6. Results of Unit Root Tests

Variable	t-statistic	Probability	Process
ROA	-2.92856	0.0017*	Stationary
ROE	-2.37925	0.0087*	Stationary
NPM	-3.27115	0.0005*	Stationary
ETA	4.34255	0.0000*	Stationary
DTA	3.08787	0.0010*	Stationary

Note.\* Significant at 5% level

Source: Authors' Calculations using E-Views 10 software

The results of unit root tests IN Table 5 show that the null hypotheses of the unit root existence (non- Stationarity) are rejected. Therefore, these variables have no unit root.

All explanatory variables are stationary at their levels at the 1% significance. Thus, all the dependent and independent variables are stationary. Which means the data set is perfect for running econometric models, and the results will be reliable.

**Regression Analysis**

The estimated regression of the relationship of capital structure and Profitability of Islamic banks is reported in Tables 7,8,9 for fixed effect (third column) and random effect (fourth column). In addition, the Hausman test can be performed to test which of these two models is most appropriate.

Table 7. The Impact of Capital Structure on ROA

		Method	
D V	Explanatory variables	Fixed Effects	Random Effects
ROA	ETA	0.101888 (0.0002) *	0.100266 (0.0002) *
	DTA	0.013139- (0.5565)	0.009619- (0.6629)
	C	0.010684 (0.5824)	0.008132 (0.6798)
Adjusted R-squared		0.773948	0.252325
F-statistic		31.81381	10.11195
Prob(F-statistic)		0.000000	0.000195
Hausman Test Chi-Sq. Statistic			1.582408
Prob Chi-Square			0.4533

Note.\* Significant at 5% level

Source: Authors' Calculations using E-Views 10 software

Table 8. The Impact of Capital Structure on ROE

		Method	
D V	explanatory variables	Fixed Effects	Random Effects
ROE	ETA	0.120643 (0.4682)	0.110272 (0.5060)
	DTA	-0.026134 (0.8595)	-0.005651 (0.9691)
	C	0.109073 (0.3974)	0.094366 (0.4698)
Adjusted R-squared		0.788968	-0.027815
F-statistic		34.64750	0.269329
Prob(F-statistic)		0.000000	0.764951
Hausman Test Chi-Sq. Statistic			1.338494
Prob Chi-Square			0.5121

Source: Authors' Calculations using E-Views 10 software

Table 9. The Impact of Capital Structure on NPM

		Method	
D V	explanatory variables	Fixed Effects	Random Effects
NPM	ETA	1.908313 (0.0003)*	1.891037 (0.0003)*
	DTA	-0.005519 (0.9899)	0.044771 (0.9175)
	C	0.091412 (0.8104)	.054044 (0.8883)
Adjusted R-squared		0.715626	0.219884
F-statistic		23.6485	8.610236
Prob(F-statistic)		0.000000	0.000589
Hausman Test Chi-Sq. Statistic			0.594157
Prob Chi-Square			0.743

Note.\* Significant at 5% level

Source: Authors' Calculations using E-Views 10 software

Hausman test was used to test the cause-effect relation between the dependent and explanatory variables in a model. The two most often techniques used for panel regression estimation are random and fixed effect.

Hausman (1978) suggested that there should be no correlation between both individual effects and explanatory variables under the null hypothesis, with a random effect expected to be more efficient than fixed effects (Hausman, 1978)

Suppose the value of Chi-Sq Statistic is significant. In that matter, we reject the null hypothesis and accept the alternative hypothesis. The fixed effect should be used, but if the value is Insignificant, We accept the null hypothesis, and the random effect should be used.

The results of the Hausman test in the Tables 7, 8, 9 show that the random-effects model is the most appropriate for this study.

## RESULTS AND DISCUSSION

Table 7 shows the results of testing the relationship between capital structure measured by (ETA ratio), (DTA ratio) and Profitability which is measured by Return on asset (ROA) For Islamic banks. The regression coefficient for Equity to Total Assets Ratio amounted to 0.100266, at a significance level of 0.00, meaning that the ETA ratio at Islamic banks, at a level of significance of  $\alpha \leq 0.05$ , has a weak positive effect on the Profitability measured by Return on asset (ROA). The results show that the Deposit to Total Assets (DTA ratio) has no significant relationship with Return on asset (ROA). The value of adjusted R squared is slightly low ( $R^2=0.252325$ ); this explains that the ETA ratio and DTA ratio can't explain the Profitability of the Islamic banks measured by (ROA).

This result was in line with the Meero (2015), which concluded that Equity to Total Assets Ratio ETA has a positive effect on ROA, and Deposit to Total Assets (DTA) ratio has no significant relationship with (ROA) in Gulf country Islamic banks. in addition, This result is in line with conclusions made by the following studies: Lee et al. (2015a), Pasiouras and Kosmidou (2007), Staikouras and Wood (2003), Bourke (1989), Altunbas et al. (2007), Trujillo-Ponce (2013), Jouida et al. (2017), Ben Salah Mahdi and Abbes (2018, ). All of whom concluded that the Equity to Total Assets Ratio positively affects (ROA).

However, this result differs from that of the Hafeez et al. (2018) study, which concluded that the Equity to Total Assets Ratio has a negative effect on (ROA). And Deposit to Total Assets (DTA ratio) positively affects Return on asset (ROA). It also differs from the Noreen (2019) study, which also concluded that the Equity to Total Assets Ratio has a negative effect on (ROA) in Islamic banks of Pakistan.

Table 8 presents the result of testing the relation between capital structure (ETA, DTA) and the Profitability calculated by the Return on Equity Ratio (ROE). As shown in this table, the regression coefficient for ETA ratio amounted to 0.1102 at a significance level of 0.5060. And the regression coefficient for DTA ratio amounted to -0.0056, at a significance level of 0.9691, which means that ETA ratio and DTA ratio of Islamic banks do not have a statistically significant effect on ROE, at a level of significance of  $\alpha \leq 0.05$ .

This result was in line with Meero (2015), which concluded that Deposit to Total Assets (DTA ratio) has no significant relationship with (ROE).

However, This result differs from that of the Al-Farisi and Hendrawan (2011) study, which concluded that The Ratio of Total Equity / Total Asset (ETA) has a negative and significant effect on both Islamic and Conventional Banks' Profitability counted by Return on Equity Ratio (ROE). It also differs from Noreen (2019), which concluded that ROE positively correlates with ETA and DTA. This result is consistent with the opinion that additional capital could degrade a bank's profit performance.

Table 9 presents the result of testing the relationship between capital structure (ETA, DTA) and THE Profitability measured by Net Profit Margin (NPM). The regression coefficient for Equity to Total Assets Ratio amounted to 1.891037, at a significance level of 0.00, meaning that ETA ratio at Islamic banks, at a level of significance of  $\alpha \leq 0.05$ , has a strong positive effect on the Profitability measured by Net Profit Margin (NPM). This indicates an increase in total Equity of Islamic banks increases the Profitability of Islamic banks. The results suggest no significant relationship between the DTA ratio and Net Profit Margin (NPM). The result shows that the adjusted R-squared is slightly low ( $R^2=0.219884$ ). This explains that the ETA ratio and DTA ratio can't explain the Profitability of the Islamic banks measured by Net Profit Margin. This demonstrates that each of the independent variables combined (ETA ratio, DTA ratio) explain a 21.98% change in the (NPM) for Islamic banks,

This result was in line with the Prasad G (2019), which concluded that Deposit to Total Assets (DTA ratio) has no significant relationship with (NPM).

## CONCLUSION

This study investigated the impact of capital structure on the Profitability of operated Islamic Banks in GCC countries. It describes the relationship between Capital Structure measured by (DTA, ETA) and Profitability measured by (ROA, ROE, and NPM). This study shows that capital structure affects Islamic banks Profitability.

The research results indicate the ETA ratio has a positive and significant relationship with ROA. Whereas, The Deposit to Total Assets (DTA ratio) has no significant relationship with Return on asset (ROA). There is an insignificant relationship between (ETA ratio, DTA ratio) and the ROE ratio. Moreover, there is a significant solid effect between ETA ratio and Net Profit Margin (NPM), while there is no significant relationship between the DTA ratio and Net Profit Margin (NPM).

### Implications of Study

From a practical standpoint, this research bridges numerous gaps between theory and practice. This study contributes to



the capital structure's theory in reconfirming the findings of the existing literature (both theoretical and empirical) on the impact of capital structure on Islamic banks' Profitability in the GCC, the findings can serve as a guidance for Islamic bank managers in GCC and supports the decision-makers to rely on capital structure, unique for Islamic banks, whether in the GCC.

### Recommendations

For Future research:

- In terms of the methodological materials and tools, it is recommended to conduct the research topic using interviews, and surveys addressed to managers, executives, and Shariah Supervisory Board (SSB) of Islamic banks in the GCC to determine a suitable capital structure supported by the results of the present paper.
- Additionally, it is advised that the research approach be applied in other places where Islamic banking is practiced. And in the economies that have recently become involved in Islamic banking.

### Limitation and Scope

The present study examines the relationship between capital structure and Profitability in Islamic Banks. The study covers 05 Islamic banks from 05 Gulf countries: Saudi Arabia, UAE, Qatar, Bahrain, and Kuwait, but extensive (2010-2020).

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