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Internal Determinants of Capital Structure of Islamic Banks: Evidence from the Middle East

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Abstract: This study aimed to determine the factors affecting the capital structure of Islamic banks for a sample of the Middle East for the period 2011-2021. The study used a panel data method by pooling ordinary least squares, fixed effects, and random effects to determine the relationship between book leverage and internal variables such as profitability, size, non-debt tax shield, growth opportunity, tangibility, liquidity, and earnings volatility.

The descriptive statistics indicate that Islamic banks are highly leveraged. The results of regression showed that the impact of profitability, size, and growth opportunity is positive on book leverage. In contrast, the results indicated a negative impact of non-debt tax shield and liquidity on book leverage. The results also showed no impact of tangibility and earnings volatility on book leverage.

Based on the results, Islamic banks in the Middle East enjoy a special method of choosing capital structure depending on their competitive advantage derived from the concentration of a large proportion of Muslim people dealing with them. Nevertheless, the management of Islamic banks must take the mentioned variables into consideration.

Keywords: capital structure, Islamic Banks, Middle East, determinants, book leverage, profitability, non-debt tax shield, growth opportunity

JEL Classification: G32, G21, O16

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Introduction

Islamic banks attempt to provide Muslims with a legitimate alternative to traditional banks by avoiding any religious offenses in financial and banking transactions such as usury and gharar. Over the past few decades, Islamic banking has developed significantly and widely. An IFSB report (2020) indicates that Islamic banking operations reached $2.44 trillion in 2019, compared to nearly $2.19 trillion in 2018 (IFSB, 2019). This development and proliferation have led to increased research in various areas related to this sector, and the capital structure is an important area that has witnessed significant progress in research.

Capital is considered a mainstay in banks, it represents the main line of defense to reduce the impact of loss on banks (Kumar et al., 2017). The capital structure is part of the fixed financial structure of banks, it consists of the sources of financing that banks use to finance their assets, it consists of equity and debt (Al-Harby, 2019). The capital structure consists of long-term sources of financing, while the finance structure consists of all long-term and short-term sources of financing.

Each source of financing has a cost and a risk. If the bank relies on financing its assets with debt, it reduces the cost, but it may be exposed to financial leverage risks. It may suffer from liquidity risks and inability to pay its obligations in the future, which leads to fluctuations in return on equity and exposure risk of default and bankruptcy. Therefore, banks try to reach the optimal capital structure to achieve the lowest possible cost of funding sources. Consequently, capital structure decision is a critical decision for the managers and owners of banks (Mahfuzah & Raj, 2012).

This paper aims to discuss the internal factors that affect the capital structure of Islamic banks in the Middle East. Many studies discussed that addressed the determinants of the capital structure in Islamic banks, such as (Guizani, 2021; Bukair, 2019; Sheikh & Qureshi, 2017; Khan et al., 2021).

It is noted that most studies investigate internal and external factors, and most of them focused on the comparison between Islamic and conventional banks. This paper investigates only internal factors and the case of Islamic banks without a comparison with conventional banks.

Studying the impact of factors affecting the capital structure of Islamic banks is very important because it helps the administration to determine the optimal mix of capital structure to achieve the lowest possible cost and the least degree of risk.

Based on the foregoing, this study aims to test the impact of bank-specific determinants on the capital structure of Islamic banks. The study investigated the impact of profitability, tangible assets, size, growth opportunities, non-debt tax shield, liquidity, and earnings volatility on the book leverage of Islamic banks in the Middle East.

The results have practical implications for the performance of Islamic banks, as they show the impact of bank-specific internal factors on capital structure. The results of the study help to reach an optimal capital structure and help to determine the future plans of the bank. The positive effect of profitability on book leverage means that more money should be invested to increase profitability and thus attract more deposits. The negative effect of liquidity on the book leverage means the need to reduce liquidity ratios close to the minimum permissible limits and direct the surplus towards investment.

Literature Review

Capital Structure Theories

Modigliani-Miller (MM) began the research on capital structure in 1958 with three models. In the first model, they assumed that the value of the company depends on profit before interest and tax, it does not depend on the capital structure if the financial markets have a high level of efficiency. The second model assumed that the cost of equity increases with the increase in financial leverage, and that the benefit of the low cost of debt financing is accompanied by a rise in the risk of bankruptcy, and therefore a return must be achieved in line with the degree of risk. The third model of Modigliani-Miller (1963) assumed the possibility of financing the capital entirely with debt, which is the case when the debt interest is tax-exempt, and benefits from the tax shield that is not used in case of financing through equity.

Based on MM theories of capital structure and its development, Toumi (2020) expected that the capital structure in Islamic banks differs from conventional banks due to self-censorship represented by Islamic ethical controls and external control represented by the Shariah Supervisory Board.

In the Static Trade-off Theory, Kraus and Litzenberger (1973) suppose that the optimal capital structure is determined when the tax advantages of borrowing are equal to the cost of the bankruptcy risk. Amidu (2007) indicates a positive relationship between financial leverage and tax, where the benefit from the tax deduction

increases as the tax has increased. Therefore, Saif-Alyousfi (2020) suggests that banks should focus on the benefits and costs of debt financing.

According to Toumi (2012), the size of tangible assets in Islamic banks exceeds the size of tangible assets in traditional banks, so the risk of bankruptcy is lower in Islamic banks; as such, the debt ratio is higher in Islamic banks despite the similarity of the method of estimating the tax savings for debt in Islamic banks and traditional.

According to Myers and Majluf (1984) in Pecking-Order Theory, there is no optimal ratio for debt. Chin & Zhao (2005) argue that the inconsistency of information leads to the reliance on debt and then equity instead of retained earnings to finance new investments.

Toumi (2012) found that the legal provisions that govern financial transactions in Islamic banks, such as the prevention of gharar, ignorance, and fraud, lead to a reduction in the disparity of information between owners and managers, and therefore it is expected that the proportion of equity will be greater; this indicates a contradiction in the situation between Pecking-Order Theory and Static Trade-off theory.

According to Jensen and Meckling (1976), Agency Cost Theory is based on a conflict of interests between owners, managers, and creditors, and it is necessary to reduce the cost of this conflict to determine the optimal capital structure, so banks may resort to relying on debt to reduce the moral risks of managers (Gocmen & Sahin, 2014).

In contrast, Toumi (2012) believes that Islamic banks prefer to depend on equity as a source of financing because the Sharia supervisory board helps reduce conflict between owners and managers.

Ross (1977) developed the Signaling Theory, which focused on the impact of information asymmetry between managers and external investors on the capital structure. He found that the company is trying to get rid of asymmetric information through its financial decisions which include signal clarifying information to investors. Bhattacharya and Dittmark (2004) argued that the cost of the signal reflects its credibility. The company issues debt or equity if there are insufficient internal resources, and it issues new shares if the market price is higher than the real value of the share; consequently, this is a negative signal that leads to a decrease in the market price of the share.

Market Timing Theory, developed by Baker and Wurgler (2002), depends on managers choosing the right time to improve the capital structure by expanding their reliance on equity as a low-cost source of financing, so they issue new shares when the stock prices of the company rise and its market value exceeds its book value; the difference between the two values belongs to the company, which contributes to reducing the cost (Setyawan, 2011). The researchers believe that the managers of Islamic banks can take advantage of the rise in the bank's stock prices to enhance the proportion of equity in the capital structure.

Empirical Studies on Determinants of Capital Structure

The capital structure is a combination of debt and equity that is used to finance assets in Islamic banks (Shah et al., 2017). The capital structure is important in the management of Islamic banks as it contributes to planning for the future of the bank. The optimal capital structure of Islamic banks maximizes the value of the bank and reduces the cost of capital (Sheikh & Qureshi, 2017). Islamic banks choose the best combination of capital structure to reduce the cost.

There are many studies which examined the determinants of capital structure in Islamic banks and shown that capital structure is influenced by internal and external factors. This effect differs according to the circumstances of each country, as well as to each period of time (Bancel & Mittoo, 2004). The studies of one country focused on internal factors, while international studies focused on external factors that vary from country to country (Saif-Alyousfi et al., 2020).

Although researchers differ in choosing the variable expressing capital structure, most studies have used Book Leverage (BL), which is measured by the ratio of total liabilities to total assets as the dependent variable, such as Guizani, (2021), Al-Harbi (2019), Thabet et al. (2019), Khan et al. (2021) Sheikh and Qureshi (2017), Khokhir and Al-Habashi (2019), and Saif Al-Yousifi et al. (2020), in contrast, some studies have used the Debt-to-Equity Ratio (DER) that is measured by total liabilities to total equity such as Bukair (2019) and Gropp and Heider (2010). Other studies have used the Leverage Ratio (LR), which is measured through investment and checking accounts to total assets, such as Fauziah et al. (2020) and Alziot et al. (2021). Deesomsak et al. (2004) used the Debt-to-Capital Ratio (DCR), which is measured by the ratio of total debt to total debt, market capitalization of equity, and book value of preferred stock. Anggareni et al. (2021) suggested Capital Adequacy Ratio (CAR) as a dependent variable reflecting capital structure.

Some studies have focused on profitability as an important factor that influenced the capital structure of Islamic banks. Anggareni et al. (2021) and Fauziah et al. (2020) showed a positive impact of Return on Assets (ROA) on the capital structure of Islamic banks. These results support the trade-off theory, in which highly profitable banks increase the amount of debt to reduce taxes (Waluyani & Muflih, 2022). In contrast, the pecking order theory predicts a negative impact of profitability on capital structure, so banks start using internal sources to finance their assets, then they use debt to finance their assets (Guizani, 2021; Sheikh & Qureshi, 2017; Saif-Alyousfi et al., 2020). Al-hunnayan (2020) showed a negative impact of ROA on the capital structure of Islamic banks in the GCC Region. The return on assets had no impact according to Bukair (2019) and Khokher and Alhabshi (2019).

The bank's assets are divided into tangible and intangible assets. Tangible assets are measured by their percentage of the bank's total assets (Al-hunnayan, 2020). In trade-off theory, tangible assets are useful as collateral and they are important in bank financing decisions because they help pay off debts if the bank fails to meet its leverage, and then the bank is safe from bankruptcy. Therefore, banks with large tangible assets have less risk, which means that the tangible assets ratio has a positive relationship with leverage. Shah et al. (2017) found that the tangible assets ratio is positively correlated with the leverage of Islamic banks in Pakistan. In contrast, Khan et al. (2021) found that the tangible assets ratio is negatively related to leverage in Saudi Arabia. This result supports the pecking-order theory, a bank with high tangible assets becomes less prone to information asymmetric problems (Al-Harby, 2019).

According to agency theory, pecking order theory, and theory of free cash flow, increasing the size of the bank increases customer confidence in saving their money in the bank and attracts investors to invest their money in the bank (Waluyani & Muflih, 2022). Guizani (2021), Bukair (2019), Khan et al. (2021,) and Saif-Alyousfi et al. (2020) showed a positive effect of the size of the bank. As a result, these theories predict a positive relationship between size and leverage. Large banks tend to be more leveraged than equity because they have easier access to the capital market. In addition, Large Islamic banks have lower bankruptcy costs because Islamic banks must conduct their business in accordance with the principles of Sharia, which in turn has implications for a diversified portfolio, and investment risks tend to be low (Bukair, 2019). Muhammad & Azmiana (2021) showed that size has a negative impact on the capital structure of Asian and European Islamic banks.

Several studies have examined the impact of growth opportunities on the capital structure of Islamic banks. According to the pecking order theory, banks with

higher growth rates have a higher level of leverage, which increases their investment opportunities. A bank with a high growth rate of assets increases its growth opportunities. As the value of assets grows, the company has a higher growth opportunity and thus requires more capital (Waluyani, & Muflih, 2022). Khan et al. (2021), Al-Harby (2019), and Gropp and Heider (2010) showed a positive impact of growth opportunities on the capital structure. In contrast, Guizani, (2021), Saif-Alyousfi et al. (2020), and Bukair (2019) predicted a negative impact of growth opportunities on the capital structure of the Islamic bank. This relation is explained by the attempt of Islamic banks to reduce the financial leverage to avoid any financial crises that exceed the possibility of the growth of the bank. In addition, the loss of Islamic banks led to a decrease in tangible assets and a decrease in using assets as a guarantee for obtaining debts.

The dependence of banks on debt requires large fixed payments. If the bank cannot meet these payments, it will go bankrupt and incur great costs, and thus the bank can use tax shields as an alternative to debt (Guizani, 2021). According to the trade-off theory, banks with large non-debt tax shields are expected to have less leverage in their capital structures, while banks are less dependent on debt when they have higher non-debt tax shields (Thabet et al., 2017). In contrast, banks with a large non-debt tax shield will have high collateral assets (Al-Harby, 2019). Thabet et al. (2017) concluded that is there no effect of tax on the capital structure. Some studies suggested Non-Debt Tax Shield (NDTS) as a factor affecting the capital structure. Guizani (2021) and Khokher and Alhabshi (2019) found a positive impact of a Non-Debt Tax Shield on the capital structure. In contrast, Deesomsak et al. (2004) and Thabet et al. (2017) found a negative impact of a Non-Debt Tax Shield on the capital structure in Islamic banks. Whileukair, (2019) and Al-Harby (2019) found no impact of a Non-Debt Tax Shield on the capital structure in Islamic banks.

Some studies examined the impact of the liquidity ratio on the capital structure in Islamic banks. According to the trade-off theory, banks with high liquidity can reduce the risk of bankruptcy, and they have the ability to increase debt. Thus, more liquid banks are expected to have higher leverage (Guizani, 2021). In contrast, the pecking-order theory predicts a negative impact of liquidity on a the leverage of the bank. Belkhir et al. (2016) found that higher liquid assets mean less consistency in information, which encourages equity financing. On the other hand, Islamic banks cannot use debt instruments or financial derivatives due to the restrictions imposed by Sharia, in addition to the weakness of the interbank

market, as Islamic banks prefer to maintain liquidity to maintain high capital reserves and decrease liquidity risks, but high liquidity in Islamic banks affects profitability (Bitar et al., 2018). Bukair (2019) argued banks with more liquidity may strengthen their capital structure by reducing liquidity risk, which means a lower demand for debt. Bukair (2019) and Al-Harby (2019) proved a positive impact of the liquidity ratio on the capital structure. According to Saif-Alyousfi et al. (2020) and Deesomsak et al. (2004), there is a negative impact of liquidity ratio on the capital structure. While Guizani (2021) and Alziot et al. (2021) found no effect impact of the liquidity ratio on the capital structure.

In a different context, some studies examined the impact of the risks on the capital structure in Islamic banks. Most of the studies (Guizani, 2021; Fauziah et al. 2020; Khokher & Alhabshi, 2019; Al- Harby, 2019) showed no impact of risk on a capital structure in Islamic banks. In contrast, few studies showed a negative impact of the risks on the capital structure in Islamic banks (Thabet et al., 2017; Gropp & Heider, 2010). A bank with stable profits will have larger deposits and incur higher fixed expenses than a bank with fluctuating profits. A less stable bank may face a higher risk of bankruptcy so that the company reduces its debt level (Waluyani, & Muflih, 2022). Trade-off theory also predicts a negative impact of earnings volatility on leverage. Thus, banks with stable incomes have higher debt levels, because they can pay off their debts on time and benefit from tax protection. Sheikh and Qureshi (2017) demonstrate a positive impact of earnings volatility on the leverage of banks in Pakistan. This can happen because companies which face high business risks will increase debt and try to maximize the benefits of tax shields.

However, we note that studies examined all internal and external factors, while this study focuses on the internal determinants that affect the capital structure of Islamic banks.

Data and Methodology

The study examines the bank-specific determinants of capital structure in Islamic banks. It focused on Middle Eastern Islamic banks, which comprised 22 Islamic banks from 11 countries. The data were collected annually from 2011 to 2021, covering a period of 11 years. The study sample available to us is balanced panel data and consists of 242 bank-year observations. The data are collected from annual reports published by Islamic banks, and all available data are denominated in US dollars. Table 1 summarizes the study sample.

Table 1

Banks included in the sample

	Bank	Country
1	Kuwait Turk Bank	Turkey
2	Albaraka Turk Bank	Turkey
3	Jordan Islamic Bank	Jordan
4	Islamic International Arab Bank	Jordan
5	Safwa Islamic Bank	Jordan
6	Palestine Islamic Bank	Palestine
7	Iraqi Islamic Bank	Iraq
8	Syria International Islamic Bank	Syria
9	Cham Bank	Syria
10	Qatar Islamic Bank	Qatar
11	Qatar Islamic International Bank	Qatar
12	National Bank of Kuwait	Kuwait
13	Kuwait Finance Home	Kuwait
14	Bank Nizwa	Oman
15	Al Rajhi Bank	KSA
16	Bank Albilad	KSA
17	Bank Aljazira	KSA
18	Abu Dhabi Islamic Bank	UAE
19	Emirates Islamic	UAE
20	Dubai Islamic Bank	UAE
21	Bahrain Islamic Bank	Bahrain
22	Islamic ABC	Bahrain

Source: Prepared by the researchers

The study used the panel data method to estimate the impact of internal determinants on Book Leverage (BL) as a dependent variable that expresses the capital structure. This method illustrates the impact of the change of time and the change of variation between syllabic units. This method is characterized by prediction accuracy that combines the characteristics of time series and cross-sectional data. The panel data method consists of three levels of regression, the Pooled Regression Model (PRM) test does not include the bank effect and time, so the intercept

and slope are constant, which is estimated by the Pooled Ordinary Least Squares (POLS) model, and the Fixed Effect Model (FEM) test that shows the behavior of each dataset individually, the slope is constant, and the intercept varies according to the observations and does not differ according to time; this means that it is constant for each bank, and the Random Effect Model (REM) test is a special case of the Fixed Effect Model (FEM) (Sheikh & Qureshi, 2017).

Variables

In order to useful comparison, the study used the most reliable and most appeared variables in previous studies. In this study, we adopted book leverage as a dependent variable and used return on assets, tangible assets, size, growth opportunity, non-debt tax shield, liquidity, and earnings volatility as independent variables. Table 2 presents the definition of variables.

Table 2

the definition of variables

Variables	Proxy	Definition
Dependent variable		
Book Leverage	BL_{it}	Total liabilities$_t$ to total assets$_t$
Independent variables variables		
Return On Assets	ROA_{it}	Earning before tax to total assets
Tangible assets	TAN_{it}	Total fixed assets to total assets
Size	$\log Z_{it}$	Log of total assets
Growth opportunity	GO_{it}	Book value of total assets minus book value of owner equity plus market value of owner equity to book value of total assets
Non-debt tax shield	$NDTS_{it}$	Depreciation to total assets
Liquidity	LQ_{it}	Current assets to current liabilities
Earnings volatility	EV_{it}	Change in earnings on sample period

Source: Sheikh & Qureshi (2017), Al-Harby (2019), Khan et al. (2021) and Guizani (2021).

The Econometric Model

Following Sheikh & Qureshi (2017); Khan et al. (2021), the regression models are expressed as:

$$BL_{it} = \beta_0 + \sum \beta_{1i} ROA_{it} + \beta_{2i} TAN_{it} + \sum \beta_{3i} logZ_{it} + \sum \beta_{4i} GO_{it} + \sum \beta_{5i} NDTS_{it} + \sum \beta_{6i} LQ_{it} + \sum \beta_{7i} EV_{it} + \varepsilon_{it} \ldots\ldots \text{POLS}$$

$$BL_{it} = \beta_0 + \sum \beta_{1i} ROA_{it} + \beta_{2i} TAN_{it} + \sum \beta_{3i} logZ_{it} + \sum \beta_{4i} GO_{it} + \sum \beta_{5i} NDTS_{it} + \sum \beta_{6i} LQ_{it} + \sum \beta_{7i} EV_{it} + \mu_{it} \ldots\ldots \text{FEM}$$

$$BL_{it} = \beta_0 + \sum \beta_{1i} ROA_{it} + \beta_{2i} TAN_{it} + \sum \beta_{3i} logZ_{it} + \sum \beta_{4i} GO_{it} + \sum \beta_{5i} NDTS_{it} + \sum \beta_{6i} LQ_{it} + \sum \beta_{7i} EV_{it} + \varepsilon_{it} + \mu_{it} \ldots\ldots \text{REM}$$

Where the subscript i denotes the cross-sectional dimension, t represents the time-series dimension, β is a vector of parameters, uit is a disturbance term and is defined as uit = μit + vit where μit denotes unobservable individual effects and it vit denotes remainder disturbance.

Findings and Discussions

Table 3 presents the descriptive statistics of the dependent variable and independent variables. The descriptive statistics include the mean, the standard deviation, the Coefficient of Variation, the minimum value, and the maximum value. Table 3 shows that the number of observations is 242, and it appears that the mean of the book leverage of Islamic banks is 73%, which means that 73% of their assets are financed by deposits and non-deposits liabilities, which eventually means that 26% of their assets are financed by owner equity. The percentage of book leverage is high because Islamic banks rely on investing by using the money of others by accepting deposits in the form of current or investment accounts (Sheikh & Qureshi, 2017).

Table 3

Descriptive Statistics of Variables, 2011–2021

Variables		Obs.	Mean	SD	COV	Min	Max
BL_{it}	%	242	73	25	34	0.32	95
ROA_{it}	%	242	1.56	1.85	120	-6.09	8.22
TAN_{it}	%	242	1.81	1.91	106	-0.11	16
Log Z_{it}		242	3.57	0.97	27	0.24	5.23
GO_{it}	%	242	65	32	49	-99	92
$NDTS_{it}$	%	242	0.15	0.11	73	-0.21	0.66
LQ_{it}	%	242	68	71	104	-0.43	527
EV_{it}	%	242	0.61	3.23	530	-8.7	27

Source: Prepared by the researchers

Correlation of variables

Table 4 reports a pair-wise correlation matrix between variables, The results show a positive and significant correlation of bank size and growth opportunities with book leverage and a negative and insignificant correlation of tangibility with book leverage. The results also indicated a positive correlation and insignificant for return on assets, earnings volatility with book leverage, negative correlation and insignificant for liquidity and non-debt tax shield with book leverage

Table 4

Pair-wise correlation matrix

	BL_{it}	ROA_{it}	TAN_{it}	$Log\ Z_{it}$	GO_{it}	$NDTS_{it}$	LQ_{it}	EV_{it}
BL_{it}	1							
ROA_{it}	0.32	1						
TAN_{it}	-0.11**	0.05*	1					
$Log\ Z_{it}$	0.24**	-0.09	-0.23	1				
GO_{it}	0.31***	0.24	-0.20	0.26	1			
$NDTS_{it}$	-0.21	-0.18***	0.43	-0.17	-0.12**	1		
LQ_{it}	-0.43	-0.25	0.15	-0.49	-0.39	0.18	1	
EV_{it}	0.06*	0.19	-0.03**	-0.13	0.07*	0.13	0.19	1

***, **, * Significant at 1%, 5%, and 10% levels respectively

Findings and Discussions

Regression results

Table 5 shows the regression results for the capital structure model for all possible samples. We conducted the Breusch and Pagan Lagrange Multiplier (BPLM) test to decide which model is appropriate for the estimation model. Based on the results of the BPLM test, we accept the null hypothesis, and this indicates that insignificant differences exist between these banks. Therefore, simple OLS regression is suitable for analyzing the data

Table 5

BPLM test

Dependent Variable	Statistic Value	p-value
Book Leverage	0.08	1.0

Source: Prepared by the researchers

Table 6 presents the impacts of the independent variables on book leverage. The results showed that the Return On Assets (ROA) has a significant positive impact on the book leverage according to the POLS method and the FE method. The results show a significant positive impact of size (Z) on book leverage according to the POLS method. The results also show a significant positive impact of Growth Opportunity (GO) on book leverage according to the POLS method and a significant negative impact of growth opportunity on book leverage according to the RE method. According to the POLS method and the FE method, Non-Debt Tax Shield (NDTS) and liquidity (LIQ) have a significant negative impact on the book leverage.

Table 6

Effects of independent variables on book leverage

	POLS		FEM		REM	
	Coefficient	t- statistic	Coefficient	t- statics	Coefficient	t-statics
C	42.2511***	6.2132	69.0735***	6.8856	61.3183***	5.6495
ROA_{it}	3.2457***	3.8486	2.6901***	3.0669	0.2092	0.4143
TAN_{it}	1.0627	1.2500	0.1874	0.1996	0.5036	1.0236
$logZ_{it}$	6.3446***	4.1196	1.8943	0.9838	3.2954	1.2685
GO_{it}	0.1433***	2.9936	0.0839	1.6316	-26.1215***	-2.7060
$NDTS_{it}$	-35.6643**	-2.2515	-34.2653***	-2.0540	0.0562	1.4891
LIQ_{it}	-0.0499***	-2.2563	-0.1090***	-3.9230	-0.0084	-0.0635
EV_{it}	0.1888	0.4113	0.1665	0.3199	-0.0739	-0.3342
Obs.	242		242		242	
R^2	0.3184		0.2596		0.0944	
F-statistic	15.8208		11.7184		3.4848	
Prob. F- statistic	0.000		0.000		0.000	
Hausman x^2					0.0000	
Prob. Hausman x^2					1.0000	
Wald x^2			44.0039			
Prob. x^2			0.0000			

***, **, * Significant at 1%, 5%, and 10% levels respectively.

Although the results of all models were presented in Table 6, the interpretation of the results depended on the POLS model. The results showed a positive impact of profitability on book leverage, and the descriptive statistics showed that ROA is close to 1.56%. This result supports the trade-off theory and Signaling Theory

in the fact that highly profitable banks can increase the amount of debt to reduce taxes (Waluyani & Muflih, 2022). In other words, the increase in profit will provide a positive signal to shareholders about the financial affairs of the future of the bank for investors. This result is also consistent with the agency theory, if the bank's performance improves, agency problems will decrease, and this result is consistent with the study of Anggareni et al. (2021) and Fauziah et al. (2020).

Thabet et al. (2017), Bukair (2019), and Saif-Alyousfi et al. (2020) showed that there is no impact of tangibility on book leverage. This means that changing the ratio of tangible assets to total assets does not affect the capital structure of Islamic banks, contrary to the data of trade-off theory and pecking order theory.

The results showed that the size of the bank has a positive impact on book leverage. The positive impact is consistent with the data of static trade-off theory, which states that large banks prefer to finance their assets with debt because they have a large ability to invest their money with a low degree of risk, and they have a large ability to provide low-cost banking services. This result is consistent with Guizani (2021), Khan et al. (2021), Bukair (2019), Khokher & Alhabshi (2019), and Sheikh & Qureshi (2017).

The study also showed that growth opportunity has a positive impact on book leverage. This result is similar to the results of Khan et al (2021). This is inconsistent with the pecking order theory; a positive relationship means that a bank is dependent on other people's money even though there are future opportunities for growth as a result of good performance. This result differs from Sheikh & Qureshi (2017) and Guizani (2021).

In contrast, the study found a negative impact of the non-debt tax shield on book leverage. This result is consistent with the trade-off theory, which indicates a link to NDTS with the decision of the capital structure in Islamic banks because it depends more on assets and is linked to more capital taxes than debt taxes. This result is consistent with those of Deesomsak et al. (2004) and Thabet et al. (2017).

Furthermore, the results of this study showed that liquidity negatively affects book leverage, and this is logical because the high liquidity ratio makes Islamic banks rely on their liquid assets instead of relying on debt to finance their investment. This result is consistent with the study of Deesomsak et al. (2004) and Saif-Alyousfi et al. (2020).

Finally, the study showed that there is no effect of earnings volatility on book leverage, and this is similar to the result of Deesomsak et al. (2004). This makes

sense in conventional banks because customers deposit their money in banks regardless of their earned returns. Also, the interest on customer deposits is not greatly affected by the profits of the bank. In addition, deposits in banks are insured by central banks and deposit guarantee institutions. Conventional banks can use various traditional risk management tools while some of them are not applicable for Islamic banks due to the primary ideology. Moreover, in Islamic banks, theoretically speaking, gain / loss should be shared with the depositors, so volatile earnings should be the concern of Islamic banks customers because they may be reluctant to share the losses. Secondly, Islamic banks should theoretically have zero cost of capital, i.e. they are not supposed to pay fixed return on deposits, so either banks have a current account or sharing the income with depositors could be of concern for depositors. A bank with stable profits will have larger deposits and incur higher fixed expenses than a bank with fluctuating profits. A less stable bank may face a higher risk of bankruptcy so that the bank reduces its debt level (Waluyani, & Muflih, 2022). Trade off theory also predicts a negative relationship between earnings volatility and leverage. Thus, banks with stable incomes have higher debt levels, because they can pay off their debts on time and benefit from tax protection. Sheikh and Qureshi (2017) demonstrate that earnings volatility positively affects the leverage of banks in Pakistan; this can happen because banks which face high business risks will increase debt and try to maximize the benefits of tax shields.

Conclusion

This paper examines the bank-specific factors that impact the capital structure of Islamic banks in the Middle East. To achieve the objectives of this study, data is collected from the annual reports of Islamic banks during 2011-2021. The study showed a rise in the leverage of Islamic banks; the reason for this may be that Islamic banks have a great ability to attract money in the form of investment accounts, and a large percentage of dealers in Islamic countries are directed to deal with Islamic banks because of religious motives. In addition, deposits in Islamic banks are also called accounts. Accounts are divided into current accounts and investment accounts. Investment accounts represent a large percentage of the total accounts. Investment accounts are not considered liabilities from the point of view of Islamic banks because they participate in profit and loss, but they are liabilities from the point of view of the banking sector supervisors.

The results of the regression analysis showed a positive relationship between profitability and book leverage, which means that the high profitability of Islamic

banks leads them to rely on investment accounts that correspond to deposits in traditional banks, and this is in line with the static trade-off theory.

The results also showed a positive relationship between the size of the bank and book leverage. This result is consistent with agency theory, pecking order theory, and the theory of free cash flow, increasing the size of the bank increases customer confidence in saving their money in the bank and attracts investors to invest their money in the bank (Waluyani, & Muflih, 2022; Bukair, 2019).

Moreover, the results showed a positive relationship between growth opportunities and book leverage. This result is consistent with the pecking order theory. Banks with higher growth rates have a higher level of leverage, which increases their investment opportunities. The growth opportunity of a bank goes up the higher the asset growth, as the value of assets grows, the company has a higher growth opportunity and thus requires more capital (Waluyani, & Muflih, 2022).

The results also found that there is a negative relationship between the non-debt tax shield and book leverage, which means that the NDTS is related to the capital structure decision in Islamic banks, since it depends more on assets and is associated with capital taxes more than debt taxes; this result is consistent with the trade-off theory.

Furthermore, the results showed a negative relationship between liquidity and book leverage, which mean that the higher liquid assets mean less consistency in information, which encourages equity financing. On the other hand, Islamic banks cannot use debt instruments or financial derivatives due to the restrictions imposed by Sharia, in addition to the weakness of the interbank market, as Islamic banks prefer to maintain liquidity to maintain high capital reserves to mitigate liquidity risks, but high liquidity in Islamic banks affects profitability (Bitar et al., 2018).

Finally, it turns out that there is no effect of tangible assets and earnings volatility on book leverage.

The importance of the study arises from the interest it provides to the managers of Islamic banks in choosing the optimal method for making decisions related to the capital structure according to the prevailing conditions, and taking advantage of its competitive advantage due to the popular attitude towards usury, which contributes to the flow of more money from clients to it.

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