Interest-bearing Debt and Islamic Debt vs. Shariah-compliant firms' Performance: Empirical Evidence from Malaysia

Osman Sayid Hassan Musse¹, Fauzias Mat Nor², Abdullah Mohammed Ahmed Ayedh ³

^{1,2,3} Faculty of Economics and Muamalat, Islamic Science University of Malaysia, Nilai, Malaysia

ABSTRACT

Capital structure is a major field in corporate finance with a wide range of theoretical and empirical studies. However, the Islamic capital structure is relatively a new area with fewer studies. This study is the first in its kind to apply separated debt data i.e., interest-bearing debt and Islamic debt in order to examine the effects of total interest-bearing debt and total Islamic debt on the performance of 305 continuously listed shariah-compliant firms on the Main Market of Bursa Malaysia over the period of 2010 to 2017. The study employs panel data analysis namely fixed effects model due to being the appropriate model according to Breusch-Pagan LM and Hausman tests. It also adopts return on equity as an accounting performance measure and a dependent variable.

The findings indicate that the both total interest-bearing debt and total Islamic debt have negatively affected shariah-compliant firms' performance, but it is not a significant. Meaning that shariah-compliant firms tend to prefer retained earnings over debt financing. The study also reports that current ratio and asset turnover ratio are positively and significantly associated with the performance of shariah-compliant firms. In addition, the descriptive analysis suggests that the average total Islamic leverage of the sampled shariah-compliant firms accounted 15.7 percent of total financing implying that the equity financing represents 84.3 percent of total financing. Based on these grounds, the shariah-compliant firms are largely dependent on internal financing i.e., retained earnings and equity and therefore, the findings are in line with pecking order theory assumptions.

The study encourages the financial regulatory authorities in Malaysia namely Bank Negara Malaysia and Securities Commission Malaysia to review the Malaysian capital market and improve the efficient level of equity and bond market, which in part will improve the participation of Islamic leverage in debt-equity structure of shariah-compliant firms.

Keywords

Islamic Leverage, Islamic debt, Capital Structure, Performance and Shariah-compliant firms

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

Introduction

The capital structure represents a major field in corporate finance with wide range of theoretical and empirical studies. However, the modern Islamic finance is relatively new and it offered an alternative capital structure and financing instruments, which mainly contains three types of financing i.e., equity-based financing, sale based/debt-based financing and Ijara/lease-based financing. With development of Islamic capital markets, the Islamic equity market becomes an essential element in Islamic financial system in raising and mobilizing funds for investments (Hashim et al., 2017). In the context of Malaysia, the foundation of Securities Commission Malaysia in 1993 was a huge milestone and significant step toward establishing Islamic capital market in Malaysia. Its first task was to produce the list of shariah-compliant securities according to the shariah screening methodology namely the twotier quantitative approach, which are the business activity benchmarks and the financial ratio benchmarks. By adopting the two-tier quantitative

approach, a new source of financing was introduced. It is the amount of interest-bearing debt, which is within the range of zero to 33 percent of firm's total assets (Securities Commission Malaysia, 2017). As the 2017, shariah-compliant firms represent 76 percent of listed securities on the Main Market of Bursa Malaysia with RM149.60 billion worth of Islamic assets (Securities Commission Malaysia, 2017, and IFWM, 2017). Therefore, given the significance proportion of shariah-compliant firms in Malaysian Islamic capital market and the scarcity of studies in

shariah-compliant firms in Malaysian Islamic capital market and the scarcity of studies in content of Islamic leverage and shariah firms' performance, this study will examine the effect of total interest-bearing debt and total Islamic debt on shariah-compliant firms' performance using separated debt data. The remainder of the paper is organized as follow. Section two provides brief literature review and section three reports data and research methodology. Section four presents empirical results. Finally, section five provides discussions and conclusions.

Literature Review

The capital structure studies mainly explain mix securities and financing sources that corporate managers use to finance its real investments. They focused on debt-equity choices, which are extremely crucial in corporate financing policies (Myers, 2001). This is because, changes in debtequity structure convey information to investors, which may perceive as either good news or bad news (Myers, 1984).

Historically, the debate of capital structure theories was initiated by Modigliani and Miller paper in 1958. They stated that debt-equity choices have no effect either on the value of the firm or on the cost of the capital assuming that there are no taxes, no transaction costs/no brokerage costs, no bankrupt costs and existent of symmetric information (Modigliani and Miller, 1958). However, modern capital structure theories presented a different view in regard the debtequity choices. They emphasised that debt financing is matter due to the present of taxes, the differences in information and the agency costs with the assumption that the capital market is imperfect (Myers, 2001).

In contrast to the above stated theories. Islamic finance encourages business activities that promote the real economy and contribute in enhancing the production level. It provides three major financial instruments, which are equitybased financing, sale based/debt-based financing and Ijara/lease-based financing (Khan & Bhatti, 2008). Moreover, the equity-financing mode is considered as the ideal financing instrument in a debt free banking system. Unfortunately, in the practice, Islamic debt financing current instruments such as murabaha and Ijarah equity-based financing have overtaken the financing instruments and become the dominant financing instruments (Jusoh & Khalid, 2013).

With development of Islamic capital markets, the majority of shariah screening indexes have allowed shariah-compliant firm to use a certain percentage of pure conventional debt in part of its capital structure portfolio, which falls within the range of 30 to 40 percent of firm's total assets (Ho, 2015). However, in Malaysian context, this ratio was set to be either equal to or less than 33 total percent of firm's assets (Securities This revised Commission Malavsia. 2017). financial benchmark ratio will be the maximum allowed conventional debt as a source of financing in line with the shariah-compliant guidelines meaning that this newly revised threshold does not include Islamic debt proportion i.e., murabaha, ijarah and sukuk financing in overall debt-equity structure of shariah firm (Zainudin et al., 2014). It is also highly crucial to emphasize that the shariah-compliant firms are a significant piece of Malaysian Islamic Capital Market (ICM) and overall Malaysian capital market. As figure 1 reveals the shariah-compliant firms contribute an average of 57 percent of total Malaysian Islamic capital market and 35 percent of overall the size of Malaysian capital market.

Figure 1: The size of shariah-compliant firms, Islamic capital market and Malaysian capital market.



Source: Bursa Malaysia, FAST BNM

Besides that, the shariah-compliant firms make 76 percent of total traded securities (Securities Commission Malaysia, 2017). This rapid growth is in line with the existing Malaysian policies that advocate Malaysia as a global hub for Islamic finance and as a world-class center for Islamic fund administration (Centre for Islamic Asset and Wealth Management, 2018).

On the other hand, the shariah-compliant firms operate in very restricted regulatory framework toward debt-equity choices particularly to the element of conventional debt due to the involvement of interest rate, which is prohibited in Islam. At the best scenario, the shariah firms were allowed to generate a maximum of 33 percent of firm's total assets from conventional debt as source of financing. This is based on the revised financial ratio benchmarks, which was introduced in November 2013 (Securities Commission Malaysia, 2017). This was in part of Securities Commission Malaysia's polices (SC), which intend to standardize the shariah screening methodology in order to attract Muslim investors across the world (Ayedh, Kamaruddin & Shaharuddin, 2019). In contrast, non-shariah firms enjoy flexibility toward debt-equity choices, which involves a trade-off between tax benefits and financial distress costs (Ross et al., 2009). In sometimes, non-shariah firms prefer debt over equity due to a taxi-deductible expense (Myers, 2001).

Moreover, the two-tier quantitative approach argues that the shariah-compliant firms' business activity and financial ratios must stay within the stated ratio in order to maintain the shariah status. This new financial threshold, thus, limits shariah companies' ability to raise interest-bearing debt as a source of financing raising a greater concern that the new threshold of financial ratio may affect the performance of shariah-compliant firms. This is in part one of reasons that lead this paper to investigate the effects of total interest-bearing debt and total Islamic debt on the performance of the listed shariah-compliant firms on the Main Market of Bursa Malaysia.

Data and Methodology

Sample and Data Sources

The study sampled the 305 continuously listed shariah-compliant firms on Main Market of Bursa Malaysia (MMBM) over the period of 2010 to 2017, which represent the whole population that met the sampling requirements. The primary requirement is that each shariah firm should be continuously reported as a shariah firm in every semi-annually report of Securities Commission Malaysia (SC) during the study period. As consequences, if a firm is delisted from one of (SC)'s semi-annual report within the selected study period due to the failure to meet shariahcompliant requirements, that particular firm will be disqualified and as a result, it should be dropped from the paper's sample list. This study selected the listed shariah-compliant firms on Main Market of Bursa Malaysia, because, the main market publishes only the well-established and the largest firms. On the other hand, the study shariah-compliant financial excludes all institutions i.e., Islamic banks and Takaful firms from the sample list, which is a long-standing sampling criteria adopted by most prior empirical studies (Ebaid, 2009), Sheikh & Wang, 2013, and Dawar, 2014).

The study utilizes three types of data sources namely Bursa Malaysia website (BMW),

DataStream database and Securities Commission Malaysia website. The Bursa Malaysia Website is used as the main source to download the annual reports of shariah-compliant firms in order to get the separated debt data i.e., total interest-bearing debt and total Islamic debt and as well as account payable. The study also employs DataStream database to find the remaining study's variables including the dependent variable and the control variables. Finally, the study adopts The Shariah Advisory Council of Securities Commission Malaysia (SAC)'s semi-annual report in order to check whether a shariah-compliant firm is continuously reported in shariah-compliant firm's list in every semi-annual report particularly during the selected study period, which is from 2010 to 2017.

3.2. Variable Definitions

3.2.1. Dependent Variables

The existing studies of capital structure and firm performance have used various proxies to measure firm performance including return on equity, return on assets, market value to book value ratio, earning per share and others. However, this study only applies return on equity (ROE) as dependent variable and performance measure (Abor, 2007, Ebid, 2009, and Salim & Yadav, 2012). This is because, it is one of the most commonly used accounting performance proxy based on the reviewed studies (Mishra and Dasgupta, 2019).

3.2.2. Independent and control variables

The study applies two proxies of Islamic leverage, which are total interest-bearing debt and total Islamic debt. The interest-bearing debt is the ratio of conventional debt that falls within the range of zero to 33 percent of firm's total assets. It is an acceptable ratio according to the shariah screening guidelines. The study also employs a number of control variables namely account payable, current ratio, asset turnover, growth, firm size and time dummies.

The table 1 provides variable names, variable symbols, variable definition and references.

Variables	Symbols	Variable Definition	References		
Return on	ROE	Income before tax	Thomson Reuters EIKON-DataStream		
equity		divided by the			
		average total equity			
total interest-	TIBD	total interest-bearing	Chakrabarti and Chakrabarti(2019),		
bearing debt		debt to total assets	Ahmed and Afza (2019) and Vieira		
			(2017)		
Total Islamic	TD	Total Islamic debt to	Chakrabarti and Chakrabarti(2019),		
debt		total assets.	Ahmed and Afza (2019) and Vieira		
			(2017)		
Account	AP	Total accounts Yazdanfar and Öhman(2015)			
Payable		payable to total assets			
Current ratio	CR	Current assets to	nt assets to Thomson Reuters EIKON-Datastream		
		current liabilities			
Asset	AT	Asset turnover ratio	ver ratio Thomson Reuters EIKON-Datastream		
Turnover					
Growth	Growth	Percentage change in	Ahmed and Afza (2019), Chakrabarti and		
		revenue	Chakrabarti(2019), Dalci (2018) and		
			Moussa (2019).		
Firm size	SIZE	Natural Logarithm of	Vieira (2017), Tarus and Ayabei (2016)		
		total assets			
Time	Dummies	Representing DUM1	Yazdanfar and Öhman. (2015) and		
Dummies		to DUM7	Asimakopoulos et al., 2009)		

Table 1 summarises variable names and symbols, variables definition and references

Methodology

The study applies panel data analysis namely fixed effects model to study separately the effect of total interest-bearing debt and total Islamic debt on the performance of shariah-compliant firms. The selection of fixed effects model is based on the results of Breusch-Pagan LM and Hausman tests indicating that the fixed effects model is the appropriate within its peers Pooled OLS (POLS) and random effects models. The study also conducts multicollinearity test to avoid the issues of multicollinearity, which is in a state of high inter-correlations among number of independent variables. Therefore, the following model is developed:

where: ROE is return on equity, TIBD is total interest-bearing debt, TID is total Islamic debt, AP is account payable, CR is current ratio, AT is assets turnover, Growth is firm growth, Lnsize is firm size and finally dummies is the time dummy covering from 2010 to 2017.

3.3.1 Descriptive Analysis

This sub-section presents the summary statistics for the dependent, independent and control variables. The summary addresses the mean, the standard deviation, the minimum and maximum. The mean of return on equity is 9.94 suggesting sampled shariah-compliant firms the have performed well within the selected study period. The ratio indicates the shariah firm's ability to generate income by using its equity, which is an efficiency sign for asset management. The descriptive analysis also reports that the average mean of total interest-bearing debt and total Islamic debt are 14.080 and 1.607 respectively. This consequently suggests that the total Islamic leverage of sampled shariah-compliant firms represents 15.7 percent of total financing. This is due to the fact that debt financing decreases the growth especially during poor economic opportunities (Ando et al., 2017). Within the Islamic leverage, the descriptive analysis implies that the sampled shariah-compliant firms prefer interest-bearing debt as a source of financing over Islamic debt. One of the explanations of preference of interest-bearing debt over Islamic

debt is that the cost of Islamic debt financing is higher than the borrowing rate due to high default premium and overheads per capital ratios (Beik & Arsyianti, 2008).

The results also suggest that the average total interest-bearing debt stood at 14.08 percent, which

is much lower than the conventional threshold of 33 percent of firm's total assets (Securities Commission Malaysia, 2017). Based on this, shariah-compliant firms have met the primary requirement to maintain its status and to count into the sample list of this study.

Variable	Observations	Mean	Standard Deviation	Minimum	Maximum
ROE	2370	0.099367	0.181124	-2.449	3.283
TIBD	2420	0.140798	0.123666	0	1.39
TID	2431	0.016072	0.063278	0	0.69
AP	2429	0.303512	2.81242	0	121.73
CR	2409	2.709921	3.223481	0.1	64.15
AT	2386	0.760989	0.510875	0	5.09
GRWTH	2382	117.1258	1113.94	-100	31528.8
LSIZE	2433	12.1627	2.527256	2.99373	19.72348

Account payable (AP) contains trade payables, account payables and other liabilities, which is not debt i.e., interest-bearing debt and Islamic debt. The descriptive results state that the account payable accounted 30.35 percent of average shariah-compliant firms' total financing. This ratio is even higher than the percentage of total Islamic leverage in the sampled shariah-compliant firms' debt-equity structure. This is because, the account payable is interest/profit free liability. It is payable within three months or within an agreed period for the involved parts. This is an indicator that the sampled shariah-compliant firms rely on account payable as means of short-term financing. This may have a positive effect on the shariahcompliant firms' performance in the upcoming regression outcomes.

Current ratio is the ratio of current assets to current liabilities. It measures the liquidity (Moosa and Li, 2012). The current ratio is determined as greater or less than one (1). If the results record at 1 meaning that a company's current asset is exactly the same as its current liability acting an indicator of company's financial health (Fernando, 2020). As the descriptive result shows, the average current ratio of sampled shariahcompliant firms stands at 2.71 percent, which is greater than 1 suggesting that the sampled shariahcompliant companies have more current assets to pay its operational expenses and the periodic payments such as the principle and the interest/profit payments. The finding exhibits that shariah-compliant companies have a tendency to

prefer internally generated funds over borrowing as a source of financing.

Asset turnover is an indicator of efficiency, which measures the company's use of its assets and its value varies across sectors (Nurlaela et al, 2019). In this case, the mean of asset turnover ratio stood at 0.760. It is relatively less than 1, but, the low asset turnover ratio could be due to the fact that the sample size of the current study may contain random shariah-compliant firms across industries, which may have various asset turnover ratios. This is one of reasons that led reduce the overall average asset turnover ratio of the selected sample firms (Hayes, 2020). Despite the relatively low asset turnover ratio, the results may still suggest the turnover ratio will have a positive effect on shariah-compliant firms' performance in the upcoming regression estimations.

The growth averaged at 117, but its values range from -100 to 31528.8. The expectation is that the growth may end up having both signs namely positive and negative on the performance of shariah-compliant firms. The size indicates the sampled firms are well established in terms of firm size presenting an average of 12.16 in the long-term and within the range of 12.162 to 19.72. This is a clear indicator that the size will result in positive association with the performance of shariah-compliant firms in the upcoming regression results.

3.3.2 Correlation Matrix

It is an important that the variables used in the model do not exhibit perfect collinearity. It is one of the issues that lead to biased estimates. Therefore, correlation matrix is the perfect measure to determine its existence within the adopted variables. Its value ranges from-1 to +1. The -1 value indicates a perfect negative correlation, while +1 suggests a prefect positive correlation. The zero value indicates no correction within the variables. The closer value to 1 shows a strong correlation. Table 3 represents correlation matrices of the variables in the estimation for the models of this research. The variables have shown low and moderate correlations between and among the variables implying that there is no multicollinearity issue.

Variables	TID	TIBD	AP	CR	AT	GRWTH	LSIZE
TID	1						
TIBD	0.0322	1					
AP	0.0022	-0.001	1				
CR	-0.052	-0.2368	0.0169	1			
AT	-0.1434	0.0662	-0.0282	-0.11	1		
GRWTH	-0.0192	-0.0498	0.0317	0.0066	-0.0622	1	
LSIZE	0.1544	0.0244	-0.0425	-0.0212	-0.1297	-0.0206	1

Table 3 displays correlation matrices

3.3.3 Panel Regression Analysis

The study applies panel data analysis in order to examine separately the effect of total interestbearing debt and total Islamic debt on the performance of shariah-compliant firms. The panel data analysis contains three models i.e., Pooled OLS, random effects and fixed effects models. Therefore, it is a crucial to determine the appropriate model with panel's models. To achieve this, the study will run Breusch-Pagan LM and Hausman tests. Breusch-Pagan LM test is applied to compare POLS model over random effects model. It assumes that all individual specific variance components are zero, while the Hausman test can be father used to choose fixed effects over random effect.

The results reveal that the p. value of BP test result is 0.0000, which is less than 0.05. It profoundly rejects the null hypothesis and concludes that the random effects model is more appropriate than POLS model. The test statistic is $X^2=33.1$ which is significant at 1%, meaning the

unobservable return on equity effects is uncorrelated with the exogenous variables, fixed effects model is more efficient estimator than random effects model. Therefore, the fixed effects model is the preferred.

The overall p. value associated with F value under fixed effects model 0.000 and it is less than 0.05 measuring the fitness of model and indicating that the model is quite good. The explanatory variables reliably predict the dependent variables, which are in this case return on equity. The study pursues the serial correlation test in order to check the presence of serial correlation within the variables. The value of f-stat is 0.4931, which is higher than 0.05. It indicates that there is no serial correlation within the studied variables meaning that fixed effects model serves the best without the need to include robust standard error. On the other hand, the study also runs the time dummies in order to measure the time effects.

Models	Pooled OLS	Random Effects	Fixed Effects	Fixed Effects with time effects
Variables	ROE	ROE	ROE	ROE
TIBD	-0.074(-2.45)**	-0.03307(96)	-0.00429(11)	-0.00434(11)
TID	0.2692(4.33)***	0.15256(2.08)**	-0.04499(5)	-0.04311(47)
AP	0.000116(.09)	0.000785(.68)	0.001015(.81)	0.001108(.88)
CR	0.00185(1.61)	0.002925(1.9)*	0.0045(2.06)**	0.004785(2.18)**
AT	0.0924(12.65)***	0.1156(11.03)***	0.168(10.5)***	0.16903(10.25)***
GRWTH	-4.69E-0(-1.37)	-3.42E-07(11)	1.12E-06(.37)	7.04E-07(.22)
LSIZE	0.0072(4.82)***	0.00696(2.87)***	0.000701(.12)	0.000764(.13)
DUM1				-0.01088(85)

Table 4 summarizes panel data regressions results

DIMO				0.000(1(-05))
DUM2				-0.00061(05)
DUM3				0.000352(.03)
DUM4				-0.00294(24)
DUM5				0.008558(.69)
DUM6				-0.01806(-1.45)
DUM7				-0.00685(55)
Constant	-0.057(-2.72)***	-0.07974(-2.43)**	-0.0484(67)	-0.04671(62)
N. of				
Observations	2303	2303	2303	2303
R-squared	0.0761			
Prob > F=	0.0000		0.0000	0.0000
Wald chi2(7)				
Prob>chi2		[128.44]0.0000		
Multicollinea				
rity (M.VIF)	1.04			
Breusch-				
Paganly test		[582.59]0.0000		
Hausman				
Test			[33.1]0.0000	
Serial Test-				
Prob>F=			0.4931	
Time-Effect				
Test-Prob>F				0.4281

The results of fixed effects exhibit that the both total interest-bearing debt and total Islamic debt affected shariah-compliant negatively have companies' performance. This negative effect may arise due to the realization that high debt ratio increases high agency costs and the default rate, which consequently lead the risk of losing control of the company (Yazdanfar & Öhman, 2014). Other reasoning is that the use of debt may exceed beyond threshold limit at which a firm can maximize its value. In addition, high growth opportunities suggest that debt financing will negatively affect firm performance, while the opposite is true for firms with fewer opportunities (Mishra and Dasgupta, 2019).

The findings were supported by (lenka, 2017, and Ebaid, 2009), which are conducted in Czech Republic and Egypt respectively confirming that there is a negative effect between total debt and firm per¬formance measured by return on equity. In contrast, the finding also contradicts Abor's study (2005) in Ghana, which found a positive effect between total debt and firm performance using Ordinary least squares (OLS).

Knowing that the negative effect is not statically significant, it does not refrain to conclude that the findings follow the pecking order theory, which states that firms prefer internally generated funds over externally raised funds, within the external funds, debt will be issued first and equity as last resort (Myers, 1984). Meaning that shariahcompliant firms tend to prefer retained earnings over debt financing. This fact also is corroborated by the reported average current ratio in table 2 of descriptive analysis, which suggests that the sampled companies have enough internal funds, which make them less preferable to seek for external funds, which is debt (interest-bearing debt and Islamic debt).

The fixed effects model's findings indicate that the account payable has a positive effect on shariah-compliant firms' performance, but is not significant. According to the descriptive analysis, the account payable represents 30 percent of total financing. It is considered an important short-term financing with zero interest or profit payments. This is a clear indication that the account payable will have a positive effect on shariah-compliant firms' performance. The result is in contrast with Yazdanfar and Öhman's (2015) finding, which is a negative and significant between the account payable and the firm performance in Sweden case. Even though Yazdanfar and Öhman's study and the current study have examined the account payable and adopted large sample size, but the

results have ended in two opposite directions. This may be due to the fact that both studies are conducted in two different financial regulatory and capital markets.

The reported fixed effects result in table 4 shows that the current ratio has positive and significant shariah-compliant relationship on firms' performance measured by return on equity. This positive association was supported by the Studies of Zainudin et al. (2017, Zeb et al. (2016) and Dawar (2014) in Malaysia, Indonesia and India respectively. This positive effect is the commonly observed relationship, but it may result in negative effect in some cases, which is true according to the study by Asimakopoulos et al. (2009) in Greek non-financial firms. Therefore, it is worth noting that firm managers should determine a fine line dealing with liquidity, because in some cases, high ratio of current assets may lead to lower profitability (Asimakopoulos et al., 2009).

The fixed effects model also suggests that asset turnover ratio is positively and significantly associated with shariah-compliant firms' performance measured by return on equity as the descriptive analysis suggested. This implies that the shariah-compliant firms have efficiently managed their assets, which at the end contributes positively to the overall performance level of shariah-compliant firms. This finding is in line with the findings of Nurlaela et al. (2019, who reached similar conclusion in consumption industry sector's firms in Indonesia.

The finding also states that the growth is positively related to shariah-compliant companies' performance measured by return on equity, but it is not significant. The result was supported by previous studies (Sheikh & Wang, 2013, Asimakopoulos et al., 2009, and Ahmed & Afza (2019).

Finally, the results of fixed effects suggest that firm size has positive and insignificant effects on shariah-compliant companies' performance measured by return on equity. This is due to the fact that large firms enjoy economic scale and benefit at bargaining power over its suppliers and advantage of controlling reasonable size of market share, which are the key factors in determining the cost of borrowing (Akinyi & Oima, 2019, and Dawar, 2015). This finding is corroborated with some of the previous studies (Vieira, 2017, Khasawneh & A. Dasouqi, 2016, Dawar, 2014, Abor, 2005, and Ahmed & Afza, 2019). The positive effect is consistent with the predictions of trade-off theory suggesting that larger firms tend to borrow more due to the ability to diversify the risk. It is an important to note that the size effect varies between studied economic industries and this study has recorded a positive effect. However, in some cases, the firm size resulted in negative and significant effect with firm performance (Abor, 2007).

Finally, the study computed F value. Its value is 0.4281, which is greater than P. value. As a result, the study failed to reject the null hypothesis that all years' coefficients are jointly significant and therefore, there is no time fixed-effects.

Discussions and Conclusions

The reviewed literature suggests that the debate of capital structure and firm value was initiated by Modigliani and Miller in 1958 paper indicating that the capital structure does not matter in a prefect capital market. The firm value, thus, will be independent from its debt-equity structure. This assumption (irrelevant theory's assumptions) was followed by a lengthy debate providing a different view, which emphasized that financing are still matters due to the present of taxes, the differences in information and the agency costs (Myers, 2001). It resulted into the development of the modern capital structure theories namely static trade-off theory, pecking order theory, agency cost theory, Signalling Theory and market timing theory.

The capital structure is one of the major areas in corporate finance with huge theoretical and empirical studies, however, few studies have been conducted in the area of capital structure and the performance of the listed shariah-compliant firms in Malaysia (Thabet & Hanefah, 2014, and Ramli & Haron, 2017). Therefore, this study is an attempt to investigate the effects of total interestbearing debt and total Islamic debt on shariahcompliant firms' performance using return on equity as performance measure.

The findings of fixed effects model indicate that the both total interest-bearing debt and total Islamic debt have negatively affected shariahcompliant firms' performance. The negative effect is due to the realization that high debt ratio increases high agency costs and the default rate, which consequently lead the risk of losing control of the company (Yazdanfar & Öhman, 2014). It is also due to the fact that the use of debt may exceed beyond threshold limit at which a firm can maximise its value. High growth opportunities are considered as another reason, which suggest that debt financing will negatively affect firm performance (Mishra and Dasgupta, 2019).

Understanding that the negative effect is not statically significant, it does not refrain to conclude that the findings follow the pecking order theory, which states that firms prefer internally generated funds over externally raised funds, within the external funds, debt will be issued first and equity as last resort (Myers, 1984). Meaning that shariah-compliant firms tend to prefer retained earnings over debt financing. This fact was corroborated by the reported average current ratio in table 2 of descriptive analysis, which suggests that the sampled firms have enough internal funds, which make them less preferable to seek for external funds, which is debt (interest-bearing debt and Islamic debt).

The study also reports that current ratio and asset turnover ratio are positively and significantly associated with the performance of shariahcompliant firms, which is another factor that discourages shariah-compliant firms to seek for external financing namely debt. It is particularly an important noting that descriptive analysis suggests the shariah-compliant firms highly enjoy high ratio of liquidity and acceptable level of asset management/efficient, which will help them meet the operational expenses and future payments and generate sizeable income from invested projects respectively.

In addition, the descriptive analysis suggests that the average of total Islamic leverage of the studied shariah-compliant firms accounted 15.7 percent of total financing implying that equity financing represents 84.3 percent of total financing. Therefore, this implies that the shariah-compliant firms are largely dependent on internal financing i.e., retained earnings and equity, which is in line with pecking order theory suggestions.

As a policy implication matter, the findings encourage the financial regulatory authorities in Malaysia namely Bank Negara Malaysia and Securities Commission Malaysia to review the Malaysian capital market and improve the efficient level of equity and bond market, which in part will improve the participation of Islamic leverage in debt-equity structure of shariahcompliant firms.

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, Vol. 6, No. 5, pp. 438-445.
- [2] Abor, J. (2007), "Debt policy and performance of SMEs Evidence from Ghanaian and South African firms", The Journal of Risk Finance, Vol. 8, No. 4, pp. 364-379.
- [3] Ando, k et al. (2017), "Business Performance of Firms Using Debt". Policy ResearchInstitute, Ministry of Finance, Japan, Public Policy Review. Vol.13, No.2, pp. 167-182
- [4] Akinyi, R. T and Oima, D. O. (2019), "Effect of Firm Size on Financial Performance of Sugar Firms in Western Kenya", International Journal of Education and Research. Vol. 7, No.9, pp. 211-218
- [5] Asimakopoulos, I. Samitas, A. and Papadogonas, T. (2009), "Firm-specific and economy wide determinants of firm profitability Greek evidence using panel data", Managerial Finance Vol. 35, No. 11, pp. 930-939.
- [6] Ayedh, A.M.A, Kamaruddin, M.I.H and Shaharuddin, A. (2019), "Challenging the Current Shariah Screening Methodology Assessments in Kuala Lumpur Shariah Index (KLSI)", International Journal of Academic Research in Accounting, Finance and Management Sciences Vol. 9, No.4, pp. 253–268.
- [7] Chakrabarti, A. and Chakrabarti, A. (2019), "The capital structure puzzleevidence from Indian energy sector, International Journal of Energy Sector Management, Vol. 13, No.1, pp. 2-23.
- [8] Dalci, I. (2018), Impact of financial leverage on profitability of listed manufacturing firms in China, Pacific Accounting Review, Vol. 30, No. 4, pp. 410-432.
- [9] Dawar, V. (2014), "Agency theory, capital structure and firm performance: some

Indian evidence", Managerial Finance, Vol. 40, No. 12, pp. 1190-1206.

- [10] Ebaid, I.E. (2009), "The impact of capitalstructure choice on firm performance: empirical evidence from Egypt", The Journal of Risk Finance, Vol. 10, No. 5, pp. 477-487.
- [11] Fernando, J. (2020), "Current Ratio", https://www.investopedia.com/terms/c/cur rentratio.asp, accessed on 27-12-2020
- [12] Hashim, A. M., Habib, F., Isaacs, Z. & Gadhoum, M. A. 2017. "ISRA-Bloomberg Sharī'ah stock screening and income cleansing methodologies: a conceptual paper". ISRA International Journal of Islamic Finance. Vol. 9, (1): p. 27-42.
- [13] Hayes, A. (2020), "Asset Turnover Ratio". https://www.investopedia.com/terms/a/ass etturnover.asp, accessed on 27-12-2020
- [14] Ho, C. S F. (2015), "International comparison of Shariah compliance screening standards", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 8, No. 2, pp. 222-245.
- [15] Jusoh, M., & Khalid, N. 2013. "A Model of Demand for Islamic Banks' Debt-based Financing Instruments". Jurnal Pengurusan. Vol.39: p. 31-36.
- [16] Khan, M.M. and Bhatti, M. I. (2008), "Islamic banking and finance: on its way to globalization", Managerial Finance, Vol. 34, No.10, pp. 708-725.
- [17] Khasawneh, A. Y and Dasouqi, Q. A. (2017), "Sales nationality and debt financing impact on firm's performance and risk Evidence from Jordanian companies", EuroMed Journal of Business, Vol. 12, No. 1, pp. 103-126.
- [18] Mahomed, Z. and Mohamad, S. (2018), "Malaysia's potential as a global hub for Islamic fund administration: Challenges, prospects and solutions", Centre for Islamic Asset and Wealth Management.
- [19] Mishra, S. and Dasgupta, R. (2019), "Cross-impact of leverage and firm performance: developed vs frontier bank-

based economies", Managerial Finance, Vol. 45, No. 8, pp. 982-1000.

- [20] Modigliani, F. and Miller, M.H., (1958), "The Cost of Capital, Corporation Finance and the Theory of Investment", The American Economic Review, Vol. 48, No. 3 (Jun., 1958), pp. 261-297.
- [21] Modigliani, F. and Miller, M.H. (1963), "Corporate Income Taxes and the Cost of Capital: A Correction", The American Economic Review, Vol. 53, No. 3, pp. 433-443.
- [22] Moosa, I. and Li. L. (2012), "Firm-Specific Factors as Determinants of Capital Structure: Evidence from Indonesia", Review of Pacific Basin Financial Markets and Policies (RPBFMP). Vol. 15, No. 2, pp. 1-17
- [23] Moussa, A.A. (2019), "Determinants of working capital behavior: evidence from Egypt", International Journal of Managerial Finance, Vol. 15, No. 1, pp. 39-61.
- [24] Myers, S.C. (1984), "The Capital Structure Puzzle" The Journal of Finance, Vol. 39, No. 3., pp.574-592
- [25] Myers, S.C. (2001), "Capital Structure" The Journal of Economic Perspectives, Vol. 15, No. pp. 81-102.
- [26] Ahmed, N and Afza, T. (2019), "Capital structure, competitive intensity and firm performance: evidence from Pakistan", Journal of Advances in Management Research, Vol. 16, No. 5, pp. 796-813.
- [27] Nurlaela, S. etal. 2019, "Asset Turnover, Capital Structure and Financial Performance Consumption Industry Company in Indonesia Stock Exchange", International Journal of Economics and Financial Issues, Vol. 9, No. 3, pp. 297-301.
- [28] Lenka, S. (2017), "The Relationship between Company Returns and Leverage Depending on the Business Sec¬tor: Empirical Evidence from the Czech Republic", Journal of Competitiveness, Vol. 9, No. 3, pp. 98-110.

- [29] Ramli, N. E. and Haron, R. (2017), "Debt Determinants of Shariah Approved Firms: Empirical Evidence from Malaysia", Journal of Islamic Finance, (Special Issue), pp. 188 – 204.
- [30] Ross, S. A., Westerfield, R. W. & Jaffe, J. 2010. Corporate Finance. New York: McGraw-Hill/Irwin
- [31] Salim, M. Raj Yadav, R. (2012), "Capital Structure and Firm Performance: Evidence from Malaysian Listed Companies", Procedia - Social and Behavioral Sciences, No. 65, pp. 156–166.
- [32] Sheikh, N. A. And Wang, Z. (2013), "The impact of capital structure on performance An empirical study of non-financial listed firms in Pakistan", International Journal of Commerce and Management, Vol. 23, No. 4, pp. 354-368.
- [33] Tarus, D. K and Ayabei, E. (2016), "Board composition and capital structure: evidence from Kenya", Management Research Review, Vol. 39, No. 9, pp. 1056-1079.
- [34] Thabet, O. and Hanefah, M.M. (2014), "Capital Structure in Islamic Capital Markets: Evidences
- [35] from Bursa Malaysia", Proceedings of the Australian Academy of Business and Social Sciences Conference 2014.
- [36] The Shariah Advisory Council (2017),"List of Shariah-Compliant Securities",Securities Commission Malaysia,November 2017
- [37] Vieira, E. S.(2017), "Debt policy and firm performance of family firms: the impact of economic adversity", International Journal of Managerial Finance, Vol. 13, No. 3, pp. 267-286.
- [38] Yazdanfar, D. and Öhman, P. (2015), "Debt financing and firm performance: an empirical study based on Swedish data", The Journal of Risk Finance, Vol. 16, No. 1, pp. 102-118.
- [39] Zainudin, Z. et al. (2017), "Debt and Financial Performance of REITs in Malaysia: A Moderating Effect of

Financial Flexibility", Jurnal Pengurusan. Vol. 50, No. 1, pp. 4–12

[40] Zainudin, N.B., Miskam, S.B. and Sulaiman, M.B., (2014), "Revised Shariah Screening Methodology For Shariah-Compliant Securities: New Standard To Meet Global Expectation", 1st International Conference on Management and Muamalah, 1st Icomm E-Journal Kajang, Selangor.