

CONTRIBUTING FACTORS OF ISLAMIC BANKS PROFITABILITY IN MALAYSIA

Siti Nur Alyaa Izzati Shaikh Rahim¹

UiTM Cawangan Kelantan, Kampus Kota Bharu

Nor Haryanti Md Nor^{2*}

UiTM Cawangan Kelantan, Kampus Kota Bharu

yanti647@uitm.edu.my

Nadia Farleena Mohd Aznan³

UiTM Cawangan Kelantan, Kampus Kota Bharu

nadia910@uitm.edu.my

Yusrina Hayati Nik Muhammad Naziman⁴

UiTM Cawangan Kelantan, Kampus Kota Bharu

yusrina@uitm.edu.my

Siti Maziah Abdul Rahman⁵

UiTM Cawangan Kelantan, Kampus Kota Bharu

maziah650@uitm.edu.my

Azmahani Yaacob @ Othman⁶

UiTM Cawangan Kelantan, Kampus Kota Bharu

azma928@uitm.edu.my

Abstract: Malaysia has been prosperous in implementing dual banking systems in attracting more depositors. The concept of dual banking systems became more prudent to the markets internationally. As bank profitability is one of the main factors of a stable banking system, many theoretical and empirical studies have tried to identify the determinants of bank profitability. This study was conducted to discover the relationship between fundamental strength across Islamic banks laterally return on asset with the bank size, capital adequacy and liquidity to Malaysian Islamic banks profitability. A sample size consisting of 5 years of yearly data has been gathered and summarized for 10 Malaysian Islamic Banks from 2013 until 2017. The data were then analyzed using STATA 12, specifically Pooled Ordinary Least Squares method, Random Effect Model and Fixed Effect Model. It was revealed that only liquidity is significant in determining profitability while bank size and capital adequacy are insignificantly related. According to the Panel Pooled (OLS) method, there is a significant relationship between liquidity and return on asset of Malaysian Islamic banks. The remaining independent variables, bank size and capital adequacy, are not significant but positively influence the return on asset. The result suggests that liquidity is significantly correlated to all profitability measures and hence requires some modification by management to spur back an accurate conclusion in terms of deposits ROI. The Islamic banks perhaps work in a similar direction with conventional banks in conjunction with the better economic-financial evolution, and their profits need to be secured and elaborated.

Keywords: Bank Profitability, Bank Size, Capital Adequacy, Islamic Banking, Liquidity

1. Introduction

The stable progress of Islamic banks has been the hallmark of the Muslim world financial landscape in the 1980s and 1990s since the first Islamic bank was established in 1963. Islamic banks have been accepted and trusted by almost every majority Muslim country as well as non-Muslim countries. To be more specific, Islamic banks are now playing an increasingly significant role in their respective markets with a network that spans more than 60 countries and an asset base of more than \$200 billion (Rashid & Jabeen, 2016). This is because Islamic banks are not only providing profit-

* Corresponding author: Nor Haryanti Md Nor, Faculty of Business and Management, UiTM Cawangan Kelantan, Kampus Kota Bharu, Lembah Sireh, 15050 Kota Bharu Kelantan. Email: yanti647@uitm.edu.my

sharing banking facilities, but they are also expected to undertake business and trade activities on the basis of fair and legitimate profits. Malaysia is one of the countries that has implemented the concept of Islamic finance in the banking industry for over thirty years, with the first Islamic bank established in July 1983 called Bank Islam Malaysia Berhad (BIMB). Thirty years after that, the government gave the opportunity for foreign Islamic banks in Malaysia and surprisingly has made the growth of Islamic banking in Malaysia become more rapid. In 1994, some of the selected commercial banks were legally allowed to introduce facilities of Islamic deposit which makes the Islamic banking in Malaysia was accepted due to the increasing amount of total deposits and total financing based on Islamic principles that are placed by Muslim and non-Muslim customers.

Profitability is the most crucial element in all business activities, and the same goes for banking institutions. Since the establishment of BIMB, the banking sector has improved its performance with an upward trend of average annual profit by 11% in 2017 alone. In terms of the market share of Islamic banks, Bank Negara Malaysia (BNM) reported that it quadrupled in 2016 to 28% from 7.1% in 2010. Islamic banking products and services are currently offered in 50 Muslim and non-Muslim jurisdictions worldwide. Prohibition of *riba* (interest) is the foremost important factor in establishing the first Islamic bank in Malaysia. The determinants of profitability in Islamic Banks are identified by Naceur (2008). It is very important for Islamic banks to identify the factors that may contribute to the firms' profitability to improve their performance and be more competitive in the global environment. As mentioned by Almazari (2014), low asset quality and poor liquidity are the two major causes of bank failures and represented as the key risk sources in terms of credit and liquidity risk. This attracted significant attention from researchers to examine their impact on bank profitability whereby the Islamic banks conduct the banking system that is based on profit and loss sharing (PLS) between bank and borrower, so it means that the profitability of the banks plays a vital role in maintaining the financial statement of the bank. The firms' objectives are unachievable if the profitability does not exist. The stability of the banking system can be maintained by healthy and sustainable profitability itself. Operating efficiency, financial risk and size are involved in the group of bank-specific determinants, and this is suggested by Bashir (1999). According to Trad, Trabelsi and Goux (2017) believed that to measure the profit regardless it's from Commercial Bank (CB) or Islamic Bank (IB), bank size, capital, liquidity, macroeconomic variables found to lead the result. At a later date, there are no significant differences between IBs and CBs in terms of their profitability and risk features where credit ratio is still unfavourable/unmatch to profit earned. Rashid and Jabeen (2016) discovered that a firm's profitability is positively affected by the firm's size and managerial efficiency and negatively by leverage, while sales growth induces more profits for small firms but is insignificant for large ones. Bank-specific variables used in this study are overheads, bank size, deposits, reserves, and operating efficiency.

On the other hand, the basis of this study is to rectify the shortcomings of previous research by studying the internal and external factors of Islamic bank profitability in the context of Basel regulations implementations. A recent study by Haque and Nusrat (2018) concludes that the impromptu of bank efficiency and profitability against protection against risk based on the Basel II framework, especially in the period of stress global financial crisis relies on the management of their return on asset determinants. These determinants can be classified into two groups: internal explanatory variables (or bank-specific) and external variables (macroeconomics). Looking at internal determinants, bank size, credit quality, and liquidity have very perspective points to cater to and concern. Meanwhile, for external forces such as economic conditions measured by the natural algorithm of GDP, the negative influence resulted gathered of external determinants on state-owned commercial banks' profitability.

For instance, Owusu and Alhassan (2021) had tested for preliminary significance of Nominal GDP per capita, GDP growth rate, the tax and contribution rate as a percentage of bank profits, 10-year bond yields, Nominal effective exchange rate (NEER), Real effective exchange rate (REER) and Equity market capitalization ratio to GDP. They found it challenging to explain the lack of significance of each of these variables for bank profitability most likely. This is due to the limited period under analysis, the particularities of countries' exchange rates, and the banking systems' specificities included in the study. From here, we narrow down our justification by looking at internal forces onto the Islamic bank.

Most of the previous researchers focused more on the conventional bank when it comes to the study of determinants of the banks' profitability in both developed and developing countries such as Goddard, Molyneux and Wilson (2004), Hassan and Bashir (2003), Naceur (2008), and Kosmidou (2008). Still, there has been no conclusive research done on the performance of the Islamic banking sector. There has been little research done on the profitability of Islamic banks. According to Rashid and Jabeen (2016), Aliyu and Yusoff (2016) and Idris, et al. (2011) state that the study of profitability of Islamic banks in Malaysia was conducted only in a few studies. Therefore, this research is conducted to get a clear explanation and solution about the performance of Islamic banks' profitability in Malaysia. The purpose is to decide which determinants of Islamic banks profitability appears to be most dominant. It is also essential to measure the current and past profitability and project and forecast the future profitability to compare the results.

2. Relevant Literature

When it comes to Islamic banks profitability, ROA and ROE are usually used by some studies to be referred to as the banks' profitability. As Ramlan and Adnan (2016) studied, many regulators believe ROA is the best measure of bank efficiency compared to ROE. So, this study used ROA as a proxy to determine the banks' profitability. It is supported by Suseno and Bamahriz (2017) as ROA is defined as the profit earned per dollar of assets. According to Wasiuzzaman and Gunasegavan (2013) and Weygandt, Kimmel and Kieso (2010), ROA is used to measure how well the company uses its asset to generate additional profits.

Bank size is considered to be an important element of its performance. Bank size is correlated with the concept of economies of scale, as studied by Boyd and Runkle (1993). According to Alper and Anbar (2011), size is used to link with the fact that larger banks are better placed than smaller banks in enhancing economies of scale in transactions to the direct effect that they will enjoy a higher level of profits. Two of the earliest researchers to link bank size with profitability are Bourke (1989) and Molyneux (1993). Blume, Emery and Griffiths (1971) stated that the bigger banks had more significant returns in their research. Smaoui and Salah (2012) mentioned that bank size was an essential determinant of the banks' profitability by numerous past empirical studies. Similar to Bashir (2003) and Idris, et al. (2011) revealed that bank size affects the level of 12 advantage and thus acknowledged that the standard cost of the banks' operation and information declines as the size of the bank increases.

As Hassan and Aliyu (2018) indicated, capital is a better model as an internal determinant of the banks' profitability due to the increase in profit that may lead to an increase in capital and found a positive relationship between bank capitalization and profitability. In their studies, Rao and Lakew (2012) stated that the equity to total asset ratio is used as a proxy for the bank's capital adequacy. Samad (2004), in his study, revealed that the ability of the bank to cover the asset losses would be more vital if the capital ratio is higher. To be specific, the greater the capital ratio, the lower the need for external funding is, and the higher the bank's profitability. As Molyneux (1993) indicated, higher levels of equity would decrease the cost of capital, leading to a positive impact on profitability. The capital adequacy ratio is included in the regression to identify the relationship between profitability and bank capitalization. Therefore, for the banks to 14 develop economics, a strong capital structure is essential. It provides additional strength to withstand the financial crises and enhanced safety for depositors during unstable macroeconomic conditions.

Hassani (2021) believed that the effect of size is negative, which means that any increase in size decreases profitability. Regarding the size of deposits and liquidity risk, although they are determinants of the profitability of banks in Morocco, their effect is limited. The empirical findings of his study have numerous implications for bank managers as well who wish to maximize their banks' profitability, they should increase the level of bank capitalization, reduce the level of general operating expenses, take more credit risk and not bet on income diversification nor on the growth of the assets which are not favourable to improving the Net Interest Margin.

The liquidity ratio measures the portion of the banks' assets tied up in loans. In their study, Hassan and Bashir (2003) believed the bank's liquidity could be reduced by higher liquidity ratios and increase the number of defaulting borrowers. Mairafi, Hassan and Arshad (2018) stressed that liquidity could be defined as the risk of not having cash or borrowing capacity to cover deposit withdrawals or new loan applications, making banks borrow emergency funds at a high cost. Khrawish, Siam and Khrawish (2011) found a positive relationship between liquidity risk and profitability in the existing banking literature. In contrast, Hassan and Bashir (2003) found a negative relationship between liquidity risk and profitability. Concerning the liquidity results, another study by Kosmidou (2008) has found that the relationship of ROA is negative but significant when only bank characteristics take into consideration. A survey by Idris, et al. (2011) showed that liquidity does not meet the requirement of significance. Hence, it is not an absolute determinant to affect the profitability of Islamic banks in Malaysia. Zeitun (2012) suggested that there is a positive relationship between liquidity and profitability. Nevertheless, some studies illustrate that a smaller amount of funds in liquid investments can result in higher profitability.

3. Data Analysis

The study sample was taken from the annual report of 10 local Islamic banks in Malaysia for five years yearly from 2013 until 2017. The bank listed namely Affin Islamic Bank Berhad, Alliance Islamic Bank Berhad, Ambank Islamic Berhad, Bank Islam Malaysia Berhad, Bank Muamalat Malaysia Berhad, CIMB Islamic Bank Berhad, Hong Leong Islamic Bank Berhad, Maybank Islamic Berhad, Public Islamic Bank Berhad and RHB Islamic Bank Berhad. This study used quantitative research. Panel data is selected and analysed to examine the determinants of Malaysian Islamic banks' profitability oversize, capital adequacy and liquidity. An experimental design is used as the research design in this study.

Return on asset (ROA) is used as a proxy to measure bank profitability. This ratio measured the bank's ability to generate profits from the banks' assets. Total assets, total equity over the total asset, and net loan over total assets were used as proxies to measure bank size, capital adequacy, and liquidity. Total asset data were transformed to log form while others were in ratio form, as Zeitun (2012) and Almazari (2014) suggested. The data analysis started with a descriptive statistics that describes the characteristic of the variables by interpreting the mean, maximum and minimum values and the standard deviation. Then the data were analyzed on a normality test to identify whether the data were normally distributed or not. Next, stationary tests were done to know whether the data was a station or not. Finally, the data were analyzed using the Breusch-Pagan LM test to confirm whether it is enough with pooled OLS or need to go for random and fixed effects panel data analysis by depending on the F-test value. If the probability is higher than 0.05, choosing panel pooled (OLS) is preferable as both hypotheses are not rejected.

4. Findings and Discussions

4.1. Descriptive Statistics Analysis

Table 1 below describes the variable used in this paper through their means, maximum and minimum values

Table 1: Descriptive Statistics

	ROA	Bank Size	Capital Adequacy	Liquidity
Mean	1.878	7.491	6.867	67.210
Maximum	3.43	8.260	9.07	83.25
Minimum	0.86	6.832	4.57	43.87

In overall, for the first variable ROA the mean is 1.878 while the maximum and minimum numbers are 3.43 and 0.89 respectively. The second variable is bank size which 7.491 (mean), 8.260 (max) and 6.832 (min). For capital adequacy, the mean is 6.867 while maximum and minimum numbers are 9.07 and 4.57 respectively. Lastly, the mean for liquidity is 67.2104, 83.25(max) and the minimum is 43.87.

4.2. *Normality Analysis*

Table 2: Normality Analysis

	ROA	Bank Size	Capital Adequacy	Liquidity
Probability	0.0080	0.8482***	0.1471***	0.0314
Observation	50	50	50	50

Notes: *** significant at 10%; ** significant at 5%; * significant at 1%

Table above shows that bank size and capital adequacy are normally distributed and the null hypothesis is failed to be rejected. ROA and liquidity are not normally distributed because the p-values are less than 0.05. Therefore, we can reject the null hypothesis for these two variables. In order to normalize the data, Stata 12 suggested a few methods by using ladder. For ROA, it is suggested to use square root while for liquidity is suggested to use square to normalize the data.

4.3. *Stationary Analysis*

Stationary analysis is analysed by using Breitung test in order to accept or reject null hypothesis. It is analysed by using the p-value of the result below.

Based on the results, it shows that all the variables are not station for the first test of unit root. So we cannot reject the null hypothesis as the probability values are higher than 0.05. All the variables were analysed again using 1st difference, the results show that all the variables are still not station as the p-values are still higher than 0.05.

Table 3: Stationary Analysis at 2nd difference

Variables	2 nd Difference (p-value)
ROA	0.0169**
Bank Size	0.0469**
Capital Adequacy	0.0101**
Liquidity	0.0096*

Note: ** significant at 5%; * significant at 1%

Table above shows the final result after the data were analysed using 2nd difference. All the variables were station and we can reject the null hypothesis as the probability values are lower than 0.05.

4.4. *Panel Pooled (OLS) and Panel Random Effect Model*

Table 4: Var and standard deviation for ROA

	Var	sd = sqrt(Var)
Square Root ROA 2 nd Difference	0.0484296	0.2200672
e	0.0514443	0.2268135
u	0	0

Based on the above result, it shows that the probability value is higher than 0.05. The null hypothesis of Breusch-Pagan LM Test is not rejected and it can be concluded that there is no significant random effect in the panel data. So, the best method to choose here is panel pooled (OLS).

4.5. Panel Pooled (OLS)

Table 5: Estimates of Islamic Bank profitability

	Coefficient	Std. Err	t-stat	Prob
Constant	0.000808	0.0289299	0.03	0.978
Bank Size	0.2426801	1352209	1.79	0.079
Capital Adequacy	0.0398238	0.0269036	1.48	0.146
Liquidity Square	-0.0000786	0.0000241	-3.27	0.002*

Notes: * significant at 1%

From the coefficient value, if bank size increases by 1%, return on asset will increase by 0.242%. It means that bank size has a positive relationship with return on asset. As capital adequacy increases by 1%, return on asset will increase by 0.0398%. It means that capital adequacy also has a positive relationship with return on asset. Lastly, if liquidity rises by 1%, the return on asset will decrease by 0.0000786%. It means that liquidity has a negative relationship with return on asset.

There is a significant relationship between liquidity and return on assets of Malaysian Islamic banks based on the Panel Pooled (OLS) method. The remaining independent variables, bank size and capital adequacy, show that they do not have a significant relationship with return on asset. From here, we can conclude that it accepts null hypothesis for bank size and capital adequacy. Therefore, it can be concluded that only liquidity is the significant factor that influences the return on asset of Malaysian Islamic banks.

5. Conclusion and Future Research Directions

The result discussed above shows a significant negative relationship between liquidity and return on asset of Malaysian Islamic banks. The remaining independent variables, bank size and capital adequacy, are not substantial but positively influence the return on asset. The findings result of this study is consistent with the previous study done by Hassan and Bashir (2003), who have found an insignificant relationship between bank size and return on asset. This finding was also confirmed by researchers like Smirlock (1985) and Flamini, Mcdonald and Schumacher (2009). Smirlock (1985) indicated that the effect of bank size on profitability is generally expected to turn out to be positive. Javaid, Zaman and Gaffor (2011) firmly believed that higher total assets might not necessarily lead to higher profits due to diseconomies of scales and higher loans contributing to profitability, but their impact is not significant. More importantly, equity and deposits have a significant influence on profitability. The findings on capital adequacy are also consistent with the past study done by Asutay and Izhar (2007), which indicated that capital adequacy has a positive relationship with return on asset.

On the other hand, most researchers like Sufian and Habibullah (2010) believed that there are positive but not significant relationships between the capital ratio and profitability. For the bank's liquidity, the result is consistent with the previous researchers by Wasiuzzaman and Tarmizi (2010) that shows ROA is significantly affected by only liquidity ratio. Hassan and Bashir (2003) also found a negative relationship between liquidity risk and profitability. Concerning the liquidity results, another study by Kosmidou (2008) has found that the relationship of ROA is negatively significant when only bank characteristics are considered. To summarise the results, this study suggests that liquidity is the only important factor in explaining the profitability variations for Islamic banking institutions in Malaysia, as liquidity is not a significant problem for sound banks in a reasonably competitive banking system.

For future research, it is recommended to have a long time frame of the study and broader scope of determinants. The abundance of the Islamic banks as an alternative to the conventional banks requires a better understanding, especially on the aspect of the profit-risk-taking behaviour and various determinants of profitability. This study also reviews some related literature on Islamic banks profitability direction. The literature revealed those areas that were explored, which covers bank size, liquidity and capital adequacy. Still, areas that are yet to be explored include other bank-specific

variables such as capital, ownership structure, governance and behavioural characteristics, and managerial ability.

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