

How to cite this article:

Yusuf, M. S, & Isa, M. Y. (2021). The Impact of *Ijarah*/Lease Financing on Malaysian Islamic Bank Performance. *International Journal of Islamic Business*, 6(1), 49-58.

THE IMPACT OF *IJARAH*/LEASE FINANCING ON MALAYSIAN ISLAMIC BANK PERFORMANCE

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Submitted: 06 January 2021 Revised: 06 March 2021 Accepted: 14 June 2021 Published: 30 June 2021

ABSTRACT

Ijarah (lease contract) is one of the essential financing contracts offered by Islamic banking institutions to meet the demand of the clients. This study investigates the impact of *Ijarah* financing on Islamic bank performance in Malaysia for the period from 2004-2018 using Fixed and Random Effect Models. *Ijarah* financing (IJFA) which becomes the focus variable of this study with other six independent variables; operating efficiency (EXTA), bank size (LTA), total financing (TFTA), base rate (BR), consumer price index (CPI) and gross domestic product (GDP) were regressed against return on asset (ROA) and net profit margin (NPM). The results show that *Ijarah* financing has a positive and significant impact on NPM. The findings suggest that Islamic banks should increase their portfolio of *Ijarah* financing and this is also support the concentration strategy used by banks in improving Islamic bank performances. An increase in demand for *Ijarah* financing will increase Islamic banks performance and this reflects that *Ijarah* financing as an asset creation tool that banks prefer particularly for generating income.

Keywords: *Ijarah* Financing, Islamic Banks, Bank Performance, Return on Asset, Net Profit Margin

INTRODUCTION

Islamic banks are financial institutions that do not involve any prohibited elements and all their products must strictly follow the principle of Shariah. Islamic banks offer various financing products to their clients, such as home financing, vehicle financing, personal financing and credit card (Isa, Ishak, Aziz, & Tapa, 2018) which are structured based on three fundamental contracts: sale contract, profit-sharing contract (equity-based), and lease contract (Ismail, 2019).

Ijarah is one of the lease contracts offered by Islamic banks which refers to an agreement between two parties (lessor-lessee) who transfer the benefit of an asset to another person, the lessee who will pay a rental fee to the lessor based on the mutually agreed period (Haron & Wan Azmi, 2009). According to the Bank Negara Malaysia (BNM), Ijarah is an agreement that shifts possession for the benefit of assets for a quantified interval in exchange for a specified consideration to another person (BNM, 2018). Ijarah is a unique contract used by Islamic banks compared to other contracts such as Murabahah, Tawarruq, Bay Inah and other contracts used for financing products. The distinctiveness of Ijarah contract is that Islamic banks entirely own the asset of Ijarah financing while the client is only entitled to the usufruct of the asset. The unique features of Ijarah financing might influence the risk that would affect the performance of Islamic banks in Malaysia. Islamic banks mostly face credit risk of Ijarah financing products because the clients do not have ownership of the asset compared to other types of financing (ISRA, 2018).

For commercial banks, a bank loan is a debt extended to clients comprising of principal and interest (Anderson, 1991). The clients receive an amount of money which is known as the principal while banks bear the risk that clients may not repay the principal. Therefore, the interest rate is charged as a price for that risk. For Islamic banks, a loan with interest is prohibited, thus Islamic banks cannot demand more than the principal given because it creates imbalances in the economy (Ayub, 2007). In an interest-based loan transaction, the lender gets a fixed rate of return from the borrower in the form of interest without any corresponding effort. Islam does not consider loans as an investment because money should not be allowed to give rise to more money through interest payment. Therefore, money is treated as potential capital rather than capital where it is become capital when it is invested in a business (Ismail, 2019).

IJARAH FINANCING AND BANK PERFORMANCE

Commercial banks and Islamic banks have a similar business of providing loans/financing to those in need and generating a return (interest and profits respectively) from these activities. Lepetit, Nys, Rous & Tarazi. (2008) reported that commercial banks make most of their money from loans and interest from loans constitutes a primary source of revenue for commercial banks. Similarly for Islamic banks, Grassa & Hassan (2012) found that income from financing has a significant contribution to the Islamic banks' returns. Even though loan and financing generates returns for both banks, the structure and principle of loan for commercial banks and financing for Islamic banks are different (Ayub, 2007).

Islamic banks report their financing portfolio based on Islamic contracts such as *Murabahah*, *Ijarah*, *Bai Inah*, *Mudarabah*, *Musharakah* and other contracts (Ismail, 2019). Thus, it is interesting to conduct a study on this type of financing portfolio. The policies of many Islamic banks that concentrated on debt-based financing contracts compared to equity-based financing contracts offers greater chances for researchers to study the financing behavior of Islamic banks. The issue for financing portfolios by Islamic contracts, as addressed by many authors (Ahmad et al., 2011; Rosly, 2005 and Haron, 1996) is the lack of Islamic banking data to proceed with the research. Since Islamic banks are in their development stage, Islamic banking data is hard to find and not large enough to be analyzed compared to conventional bank data.

The corporate finance theory proposes for concentration rather than diversification in loan portfolio because banks sometimes diversify beyond an optimal level where they don't have expertise on the diversified asset (Langrin & Roach, 2008). The proponents of concentration theory argue that banks can maximize the benefits of concentration from greater expertise in certain economic sectors. Banks should concentrate on a single line of business to take advantage of management expertise (Tabak *et al.* 2011). They also cited the bank crisis in the 1980's due to the over-diversification strategies implemented by Citicorp, Bank of America and many Japanese banks to support their view. Based on this point of view, Islamic banks may

choose whether to diversify in various financing products or they may opt for concentrating in a specific type of financing such as *Ijarah* financing.

Ijarah financing differs from other term financing products (such as in home financing, personal financing and others) where the client does not have ownership rights to the assets. Instead, it offers clients to lease goods with the option to purchase with some considerations (Ayub, 2007). Therefore, this product is suitable for client who wishes to acquire an asset without paying a lump sum amount. Instead, the client pays the deposit and the balance will be covered by *Ijarah* financing. In addition, the pricing of *Ijarah* financing also differs from term financing because the former uses simple profit calculation while the latter uses compounded calculation (Ismail, 2019).

A significant difference between conventional and *Ijarah* financing is that the latter involves combination of two contracts, while conventional hire purchase is structured in one contract (ISRA, 2018). Also, by using the *Ijarah* financing mode, the clients will obtain a Shariah compliant asset and free from prohibited elements in Islamic law. However, Islamic banks may penalize the clients with a certain amount in case of failure of clients to fulfill their contract obligations, where the amounts will be channeled to charity (BNM, 2018).

Based on the *Ijarah* modus operandi, the contract is solely extended by Islamic banks to the clients, thereby reflecting the risk that the contract poses to the Islamic banks. In other words, the capital is wholly owned and provided by the bank compared to other types of Islamic financial contracts. These risks may arise from information asymmetric or credit defaults which lead to the clients' failure to fulfill their financial obligations. According to Sindani, Namusonge & Nambuswa (2016), one of the negative impacts on financial institution performance is credit defaults that arise from hire and purchase financing contracts.

Currently, 13 Islamic banks in Malaysia offer *Ijarah* financing facilities to corporate and individual clients. Table 2.1 shows the list of Islamic banks in Malaysia that offer *Ijarah* financing which include *Al Ijarah Thumma Al Bai* (AITAB) and *Al Ijarah Muntahia Bitamlik* (IMB) facilities.

Table 2.1 List of Islamic banks that offer *Ijarah* Financing

Islamic Banks	Products	
Affin Islamic Bank	Hire purchase-i (AITAB).	
AmBank Islamic	Arif Hire Purchase-i (AITAB).	
	AITAB Industrial Hire-Purchase.	
Bank Islam Malaysia	Business banking: Hire purchase-i (AITAB).	
Bank Muamalat Malaysia	Muamalat Hire Purchase-i (AITAB).	
CIMB Islamic Bank	Hire Purchase-i (AITAB).	
HSBC Amanah Malaysia	Industrial Hire Purchase-i (AITAB).	
Hong Leong Islamic Bank	Auto Financing-i (AITAB)	
Maybank Islamic	Islamic Hire Purchase-I (AITAB).	
Kuwait Finance House	Automobile <i>Ijarah-</i> i (AITAB).	
MBSB Bank	Equipment Financing-I (AITAB).	
Public Islamic Bank	AITAB Hire Purchase-I.	
RHB Islamic Bank	Hire purchase-i (AITAB)	
OCBC Al-Amin Bank	Industrial Hire Purchase-i. & Equipment Financing-i	
	(AITAB)	

Source: Islamic Banks' Websites

Table 2.1 shows that most Malaysian Islamic banks offer AITAB for vehicle financing, except for HSBC Amanah, MBSB Bank and OCBC Al-Amin Bank which use AITAB financing for

equipment, machinery and industrial properties. Besides, other Islamic banks such as Bank Muamalat, Affin Islamic Bank, AmBank Islamic, Hong Leong Islamic Bank, CIMB Islamic Bank, Kuwait Financing House, Maybank Islamic, RHB Islamic Bank and Public Islamic Bank offer AITAB for their personal and corporate financing products.

FINANCING BY CONTRACT IN MALAYSIAN FINANCING BY CONTRACT IN MALAYSIAN ISLAMIC BANKS IN 2010 (IN RM BILLION) ISLAMIC BANKS IN 2021 (IN RM BILLION) Istisna'. 1.4 Mudharabah, Istisna', 1.1 Mudharabah, Musyarakah, 2 0.3 Musyarakah 0.1 , 61 BBA, 62 Murabahah 23 BBA, 43 Iiarah, 85 Murabahah Ijarah, 43

Figure 2.1: The Composition of Islamic Bank Financing

Source: Bank Negara Malaysia Website (2021)

Figure 2.1 illustrates the composition of Islamic bank financing for the year 2010 and year 2021 (January as a basis month). The results show that BBA and *Ijarah* constituted RM43 billion each on Malaysian Islamic bank financing in the year 2010. However, there is a significant increase in *Ijarah* financing to RM85 billion in the year 2021, thus becoming the second largest type of financing after *Murabahah* financing. The trends revealed that Islamic financing is predominantly dominated by sales based contracts such as *Murabahah* and BBA, followed by *Ijarah*, *Musyarakah* and other contracts.



Figure 2.2 Trend of *Ijarah* Financing in Malaysia.

Source: Bank Negara Malaysia Website (2021)

The trends of *Ijarah* financing is further elaborated in Figure 2.2, where it gradually increased from RM77 billion in 2015 to RM85 billion in 2021. The results depict the importance of *Ijarah* by increased demands for *Ijarah* financing in the Malaysian Islamic banking industry. The major types of *Ijarah* financing products offered by Malaysian Islamic banks are vehicle financing, as shown in Table 2.1. This trend was influenced by the high demand of AITAB financing which Malaysia is among the country where numbers of motor vehicles are increasing rapidly and most of them are under AITAB financing scheme (BNM 2018). Ayub (2007) also

highlighted the prospect of this *Ijarah* financing in which he believed that it has endless potential as an alternative to interest based financing.

This study analyzes the effect of *Ijarah* financing on Malaysian Islamic banks because the growth of *Ijarah* financing has significantly increased compared to other Islamic contracts such as *Musyarakah* and *Istisna*, which would positively affect the performance of Islamic bank in Malaysia. This study will be crucial for bank managers and policymakers in Islamic banks, encouraging them to reform policies and/or establish their financing system to improve Islamic banks' performances. Apart from that, the prior researches concentrated on bank-specific factor and macro-economic factors that influence the performance of both Islamic banks and their counterparty in Malaysia. This study will cover *Ijarah* financing contract, in which it will add to the empirical literature on Malaysian Islamic bank performance and performance determinants.

In addition, due to the short period of Islamic bank existence, there are limited studies that discuss the influence of *Ijarah* financing on Islamic bank performances. For instance, Alkhazaleh, Mansour & Al-Dwiry (2018) investigated the effect of financial leasing on Jordanian Islamic bank performance from 2010 to 2016 and the finding revealed that financial leasing has a significant influence on the profitability performance of Islamic banks in Jordan. In a similar vein, Alawneh, Qwader & Banikahlid (2017) studied the impact of *Al-Mudayanah* and *Al-Musharakahon*, which represents (*Al-Murabahah and Al-Ijarah*) the earning of Islamic banks in Jordan from 2000 until 2015. The results show that *Ijarah* has a significant and positive effect on both ROA & ROE. Moreover, Almsafir & Alharthi (2015) revealed that *Ijarah* has a significant and positive relationship with Islamic bank performance in Malaysia from 1984 to 2014. The finding pointed out a long-run nexus between *Ijarah* and ROA. The study also found that religious obligation is the primary factor in choosing AITAB facility (Yusoff & Kamdari, 2014).

DATA AND METHODOLOGY

This study uses unbalanced panel data and the bank level data are obtained from the Bank Annual Reports and BNM website. The sample consist of 12 Islamic banks that operate in Malaysia for the period 2004-2018 including conventional banks with Islamic window such as Citibank. A financial ratio is one of the widely used techniques in measuring bank performances and among the ratios used in measuring bank performance are Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM) (Alexandru & Romanescu, 2008). Studies conducted by Suppia and Arshad (2019), Isa & Hussin (2017), Wasiuzzaman & Tarmizi (2010) and Flamini, McDonald & Schumacher (2009) used ROA which signifies the efficiency of the bank management to create income from their assets to measure profitability. Other studies used net interest margin (NIM) to measure profitability such as the study by Ameur & Mhiri (2013) which utilized NIM as a profitability proxy because it reflects the profit generated from investment and lending or financing activities. For Islamic banks, Net Profit Margin (NPM) is used to replace NIM due to profit measurement and the existence of interest. This study employs ROA and NPM as indicators of bank performance.

Regression analysis is a statistical method used to identify the nexus between independent variables and dependent variables (Hair, Black, Babin, Anderson & Tatham, 2006). The coefficient of the individual independent variable is employed to forecast the tendency of each variable. The motivation of this study is to investigate the effect of the focus independent variable which is *Ijarah* financing on Malaysian Islamic bank performance. Therefore, this study uses two panel regression models: Fixed Effect Model (FEM) and Random Effect Model (REM). Panel data permits controlling for variables that cannot be measured and observed or variable that changes over time but not across entities (Law, 2018).

Random Effect Model (REM)

The REM considers the specific influence of banks that are not associated with explanatory variables and permits unchanging time variables to play a part in the model underlying variable. Conversely, REM is stochastic and distributed, i.e., the individual effect is not correlated with the determined error. The model is shown in these equations.

$$ROAit = \alpha_0 + \beta^1 LAGTA_{it} + \beta^2 IJTA_{it} + \beta^3 EXTA_{it} + \beta^4 TFTA_{it} + \beta^5 BR_{it} + \beta^6 CPI_{it} + \beta^7 GDP_{it} + \varepsilon_{it}$$

(1)

$$\begin{aligned} NPM_{it} &= \alpha_0 + \beta^1 LAGTA_{it} + \beta^2 IJTA_{it} + \beta^3 EXTA_{it} + \beta^4 TFTA_{it} + \beta^5 BR_{it} + \beta^6 CPI_{it} + \beta^7 GDP_{it} + \varepsilon_{it} \end{aligned}$$

(2)

where; LAGTA = log of total assets, IJTA = *Ijarah* over total financing, EXTA = expense over total financing, TFTA = total financing over total assets, BR= Base Rate, CPI= Consumer Price Index and GDP = Gross Domestic Product

The above equations illustrate the regression models which consists of dependent variables of ROA and NPM as proxies of Islamic bank performance and 7 independent variables which are divided into two parts; bank-specific and macro-economic variables. The bank-specific variables of this study are bank size, operational efficiency, liquidity and *Ijarah* financing.

- Bank size is measured using the natural logarithm of total assets as proxy. The amount of total assets is reported in the Islamic bank's statement of financial position.
- Operational efficiency refers to operating expenses such as personnel costs, establishment costs, marketing costs and administrative and general expenses.
- Liquidity is measured by total financing divided by total assets of Islamic banks. Islamic banks provide financing to clients because they are prohibited from charging any interest raising from the principal amount.
- *Ijarah* financing is a type of financing offered by Islamic banks for clients to use leased assets.

Macroeconomic variable refers to the uncontrollable factors that affect Islamic bank performance. This study uses Base Rate, CPI and GDP as proxies of macroeconomic variables.

- Base rate is a key reference rate for loans in Malaysian banks set by Bank Negara Malaysia.
- CPI is an index to show the country's inflation rate where it measures the average price of goods and services usually used by households at the designated period.
- GDP measures a country's economic development and is calculated based on the aggregate market value of goods and services produced in a country for one year period (Ahmad & Majid, 2017)

Hausman tests have been conducted to identify the best fit model between both Fixed Effect and Random Effect models in the study. Based on the results of the Hausman tests, this study uses REM for both ROA and NPM. Besides, the models were also tested for multicollinearity, heteroskedasticity and autocorrelation problems. Due to the presence of these econometric problems, the robust standard error models are considered (Gujerati & Porter, 2009).

FINDINGS AND DISCUSSION

This section reports on the regression results where the first model is for ROA, whereas the second model is for NPM. Table 4.1 shows the results for both ROA and NPM models for 12 Islamic banks in Malaysia.

Table 4.1 Panel Regression Results for ROA and NPM

	Model A ROA	Model B NPM
	REM (Robust SE)	REM (Robust SE)
Constant	1.1983	2.0180
	(0.549)	(0.488)
Bank specific	,	, ,
LTA	-0.0644	-0.0656
	(0.634)	(0.741)
IJTA	0.6988	1.6930
	(0.295)	(0.051)*
EXTA	-41.0933	65.4364
	(0.059)*	(0.019)**
TFTA	-0.0202	-0.1214
	(0.979)	(0.895)
Macroeconomic		
BR	0.1841	0.0498
	(0.201)	(0.781)
СРІ	-0.1243	-0.1254
	(0.059)*	(0.120)
GDP	0.0129	0.0581
	(0.494)	(0.013)**
\mathbb{R}^2	0.0999	0.1393
Observation	172	166
Hausman	0.5254	0.8189
Heteroskedasticity	0.0000	0.0000
Autocorrelation	0.0000	0.0009

IB: Islamic banks, LTA: log total asset, IJTA: *Ijarah*/total asset, EXTA: expenses/total asset, TFTA: total financing/total asset, BR: base rate, CPI: consumer price index, GDP: gross domestic product, P value are in parentheses

***p<0.01, **p<0.05, *p<0.1

In Model A, operating efficiency which is represented by bank expenses (EXTA) has a negative and significant relationship with ROA. For macroeconomic variables, the CPI has a negative and significant relationship with ROA. Meanwhile, for Model B, two variables, which are *Ijarah* financing and operating efficiency (EXTA) have significant and positive influences on NPM. As for the macroeconomic variable, GDP shows a positive and significant relationship with NPM.

The results show that *Ijarah* financing has a positive relationship with NPM at a 10% level of confidence with a coefficient value of 1.6930 for Model A. The positive sign indicates that a one-unit increase of *Ijarah* financing will increase in 1.6930 of NPM of Islamic banks in Malaysia. Whereas in Model B, *Ijarah* financing has no significant relationship with ROA. This result is similar to Mousa and Chedia (2016) and Hamadi and Awdeh (2012), who found that loans have positive and statistically significant relationship with net interest margins. This is because banks with large demand for loans have a greater chance of controlling the pricing, thus permitting them to charge high loan rates.

Ijarah financing is also significantly correlated to profitability of Islamic banks due low risk feature as resulted by tangible asset involved or asset backed financing. Another features of *Ijarah* financing which offer special tax benefits and possibility of using floating rate base are the advantages for this type of financing (Abdullah & Dusuki, 2006). The other reason is that Islamic banks have the opportunity to access the market and obtain the asset of *Ijarah* financing with low price from suppliers, in which will generate high NPM and would increase the profitability of Islamic banks in Malaysia.

The results are also in line with the study by Isa et al (2017) who found the diversification-concentration strategy gives different impacts to Malaysian banks and the concentration on financing by the client has more consistent results on Islamic banks than conventional banks. Islamic bank performance have a significant relationship with concentration strategy where it increases Islamic bank returns and reduces Islamic bank risks. Thus, by increasing *Ijarah* financing, Islamic banks may benefit from this concentration financing strategy in term of their performance.

CONCLUSION

Ijarah financing is one most essential products that Islamic banks offer to their clients. This study provides empirical support to the theoretical research on the nexus between *Ijarah* financing and Islamic bank performance. It contributes to the existing Islamic banking literature on bank performance by including a specific type of financing as the focus variable is to examine the influence of *Ijarah* financing.

The findings show that *Ijarah* financing has a positive and significant effect on Islamic banks' net profit margin, reflecting that *Ijarah* financing is an asset creation tool that banks prefer, particularly for generating income. The larger the net profit margin, the more successful the Islamic bank will be in managing their assets and generating profits. The results suggest that Islamic banks can rely on *Ijarah* financing to increase their performance. Therefore, they should give more attention to providing better service for *Ijarah* financing clients. An increase in demand for *Ijarah* financing will increase Islamic bank performance and their market share of *Ijarah* financing/leasing compared to their competitors in conventional banks.

The study is limited to a single-country analysis covering a short time period (2004-2018). Furthermore, since not all Islamic banks offer *Ijarah* financing facilities to their clients, the study also has to deal with the limitation of lower data frequency. Therefore, future researchers may study multi-country performance and use several advanced techniques to investigate the influence of *Ijarah* financing/leasing on Islamic bank performance which make the results more meaningful.

ACKNOWLEDGEMENT

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

REFERENCES

Abdullah, N. I., & Dusuki, A. W. (2006). Customers' perceptions of Islamic hire-purchase facility in Malaysia: An empirical analysis. *IIUM Journal of Economics and Management*. Vol. 14 (2): 177-204.

Ahmad, Z. & Majid, N.H.A (2017). Islamic bank financing, financial crisis and monetary policy in Malaysia: An interaction in the long run equilibrium. *International Journal of Islamic Business*, Vol 2 (1); 15-23

- Alawneh, A., Qwader, A., & Banikahlid, H. H. (2017). The Impact of *Al-Mudayanahand Al-Musharakahon* the Earning of Islamic Banks: A Case study of the Jordanian Islamic Bank during the Period (2000-2015). *International Journal of Academic Research in Business and Social Sciences*, 7(12), 674-690.
- Alexandru, C., & Romanescu, M. L. (2008). The assessment of banking performance-Indicators of Performance in Bank Area. University Library of Munich, Germany.
- Alkhazaleh, K., Mansour, A., & Al-Dwiry, M. (2018). To what extent does financial leasing has impact on the financial performance of Islamic banks: a case study of Jordan. *Academy of Accounting & Financial Studies Journal*, 22(1).1-14
- Almsafir, M. K., & Alharthi, A. M. (2015) Case study of the relationship between Islamic finance modes and financial performance in Malaysia. *American International Journal of Contemporary Research*, 5(6), 185-190.
- Ameur, I. G. B., & Mhiri, S. M. (2013). Explanatory factors of bank performance evidence from Tunisia. *International Journal*, 2(1), 1-11.
- Anderson, P. (1991). Bank lending. Plymouth: Northcote House Publishers Ltd.
- Arshed, N., Riaz, S., Khan, T., & Aziz, O. (2017). Financial Disintermediation and Profitability of Global Islamic Banks. *European Journal of Islamic Finance*, (7), 1-11.
- Ayub, M. (2007). Understanding Islamic Finance. West Sussex: John Wiley & Sons.
- Bank Negara Malaysia (2018) *Ijarah* Guidelines. BNM/RH/PD 028-2 retrieved from http://www.bnm.gov.my
- Chapra, I. U., Ahmed, A., Rehan, R., & Hussain, F. (2018). Consumer's preference and awareness: comparative analysis between conventional and Islamic *Ijarah* auto financing in Pakistan. *Al-Iqtishad Journal of Islamic Economics*, 10(2), 389-402.
- Elgari, M.A (2003) Credit risk in Islamic banking and finance. *Islamic Economic Studies*, 10 (2), 1-25
- Flamini, V., Schumacher, M. L., & McDonald, M. C. A. (2009). The determinants of commercial bank profitability in Sub-Saharan Africa (No. 9-15). *International Monetary Fund*.1-30.
- Grassa, R. & Hassan, K. (2012). Islamic banks' income structure and risk: evidence from GCC countries. *Accounting Research Journal*, 25(3), 227-241.
- Gujarati, D.N. & Porter, D.C. (2009) Basic Econometrics. McGraw Hill. New York
- Hair, J., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). Multivariate data analysis. (6th ed.) Upper Saddle River, Jersey, United States of America. Pearson, Prentice-Hall.
- Hamadi, H., & Awdeh, A. (2012). The determinants of bank net interest margin: Evidence from the Lebanese banking sector. *Journal of Money, Investment and banking*, 23(3), 86-98
- Haron, S. (1996). Competition and other external determinants of the profitability of Islamic banks. *Islamic Economic Studies*, 4(1), 49-64.
- Haron, S., & Wan Azmi, W. N. (2009). *Islamic finance and banking system: Philosophies, principles and practices.* Shah Alam: McGraw-Hill.
- Hassan, M.K. & Bashir, A.H. (2003) *Determinants of Islamic banking profitability*. Working Paper. 1-31. Retrieved from http://nzibo.com/IB2/Determinants.pdf pp. 1-31
- Isa, M.Y., Ishak, M.A.F, Aziz, N.A & Tapa, A. (2018) The impact of housing loan/financing on Malaysian bank risk performances. *The Journal of Social Sciences Research* ISSN(e): 2411-9458, ISSN(p): 2413-6670 Special Issue. 6, pp. 140-144
- Isa, M.Y., & Hussein, M.Y.M (2016) The impact of BNM guidelines on household loan on commercial bank and Islamic bank performances. *International Journal of Academic Research in Business and Social Sciences*, Vol. 6, No. 11 ISSN: 2222-6990
- Isa, M.Y, Ibrahim, M. & Mohamad, S. (2017) The loan/financing diversification and risk return relationship in the dual banking system. *International Journal of Economic Research* 4(16) Part 2, 267-277.
- Ismail, A.G. (2019) *Money, Islamic banks and the real economy*. Singapore: Cengage Learning. ISRA (2018) *Islamic financial system: principles and operations*. Pearson Custom Publishing. Kuala Lumpur
- KLBS (2012). *An overview of Islamic banking system in Malaysia*. Kuala Lumpur Business School. Kuala Lumpur

- Lahsasna, A. (2014) Shariah issues and resolutions in contemporary Islamic finance and banking. IBFIM. Kuala Lumpur
- Langrin, R.B & Roach, K. (2008). Measuring the effects of concentration and risk on bank returns: Evidence from a panel of individual loan portfolios in Jamaica. Working Paper. Bank of Jamaica. 1-39.
- Law, S. H. (2018) *Applied panel data analysis: short panels*. Universiti Putra Malaysia Press, Serdang, Selangor.
- Lepetit, L., Nys, E., Rous, P. & Tarazi, A. (2008). Bank income structure and risk: An empirical analysis of European banks. *Journal of Banking & Finance*, 32(8), 1452-1467.
- Mousa, M. A. B., & Chedia, H. (2016). Determinants of bank lending: Case of Tunisia. *International Journal of Finance and Accounting*, 5(1), 27-36.
- Raza, A., Akram, M., & Alam, H. M. (2011). Financial Performance of Leasing Sector. The Case of Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*. Vol. 2(12): 339-345.
- Razi, N. (2014). Islamic Banking System and Mode of Leasing: A Comparative Analysis in the Light of *Maqasid al-Shariah*. *Cultural and Religious Studies*. Vol. 2(6): 349-359.
- Rosly, Saiful Azhar. (2008). *Critical issues on Islamic banking and financial markets*. Kuala Lumpur, Malaysia: Dinamas Publishing.
- Samad, A. (2004). Performance of interest free Islamic banks vs interest based conventional banks of Bahrain. *IIUM Journal of Economics and Management* 12(2), 1-15.
- Sindani W. P., Namusonge, G.S. & Nambuswa, E. (2016). Effect of leasing on the financial performance of the county government of Transnzoia. *International Journal of Scientific and Research*, 6(9).
- Suppia, N. M. I., & Arshad, N. C. (2019). Bank specific characteristics and profitability of Islamic and conventional banks in Malaysia. International Journal of Islamic Business, 4(1), 39-53.
- Tabak, B.M., Fazio, D.M., & Cajueiro, D.O. (2010). The effects of loan portfolio concentration on paper Brazilian banks' return and risk. *Journal of Banking & Finance*, 35(11), 3065-3076.
- Wasiuzzaman, S., & Tarmizi, H. A. B. A. (2010). Profitability of Islamic banks in Malaysia: an empirical analysis. *Journal of Islamic Economics, Banking and Finance*, 6(4), 53-68.
- Yusoff, R., & Kamdari, N. A. M. (2014). Selection factors of the acceptance al-*Ijarah* thumma al bay (AITAB) in Kota Bharu, Kelantan. *Malaysian Journal of Business and Economics* (*MJBE*), 1(2).