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**STUDY ON MALAYSIAN ISLAMIC BANKS
PERFORMANCE**

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**MASTER IN ISLAMIC FINANCE AND BANKING
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By

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Pusat Pengajian Perniagaan Islam
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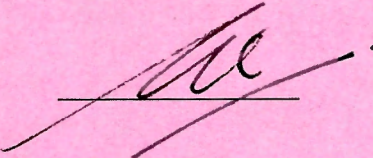
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ABSTRAK

Prestasi sistem kewangan mempunyai pengaruh besar terhadap pertumbuhan perbankan Islam kerana ia akan membawa kepercayaan dan keyakinan orang ramai terhadap keseluruhan sistem dan pada masa yang sama menyumbang kepada ekonomi yang sihat dan berfungsi dengan baik dalam sesebuah negara. Justeru, institusi kewangan termasuk bank perlu mengekalkan kekukuhan dan kestabilan kewangan mereka kerana mereka memainkan peranan penting dalam ekonomi. Oleh itu, kajian ini dijalankan untuk mengkaji pengaruh pembolehubah penunjuk kualiti aset dan faktor makroekonomi seperti Nisbah Pinjaman Kepada Deposit (LTDR), Jumlah Pinjaman kepada Jumlah Aset (TLTA), Pinjaman Tidak Berbayar (NPL), Keluaran Dalam Negara Kasar (KDNK), Inflasi (INF) dan Bekalan Wang (M3) ke atas Prestasi Kewangan Bank Islam di Malaysia. Dengan menggunakan perisian E-Views 12 dan SPSS 21, data yang diperolehi dari tahun 2012 hingga 2021 kemudiannya dinilai dan ditafsir. Analisis Regresi Berganda telah dijalankan bagi mengkaji faktor-faktor yang mempengaruhi Prestasi Kewangan Bank Islam di Malaysia. Dapatan daripada kajian ini mendedahkan hanya dua pembolehubah didapati tidak signifikan dengan Prestasi Kewangan Bank Islam di Malaysia iaitu LTDR dan TLTA. Manakala terdapat empat pembolehubah didapati signifikan dengan Prestasi Kewangan Bank Islam Malaysia iaitu NPL, KDNK, INF dan M3. Hasil kajian ini diharapkan dapat digunakan sebagai rujukan dalam kajian lanjutan kerana ia membantu penyelidik lain untuk lebih memahami penentu prestasi bank Islam. Tambahan pula, pengurus bank boleh menggunakan kajian ini sebagai garis panduan dalam mengurus dan merancang perniagaan mereka untuk mencapai keuntungan yang lebih tinggi. Kajian ini juga memberi pengetahuan mengenai sektor perbankan Islam dan gambaran yang lebih jelas mengenai Prestasi Kewangan Bank Islam di Malaysia kepada pembaca.

Kata kunci: Bank Islam, Prestasi Kewangan, Bekalan Wang, Kualiti Aset, Jumlah Pinjaman kepada Jumlah Aset, Nisbah Pinjaman kepada Deposit, Analisis Regresi Berganda

ABSTRACT

The performance of the financial system has big influences on the growth of Islamic banking as it will bring public trust and confidence in the whole system and at the same time contribute for a healthy and well-functioning economy of a country. Hence, financial institutions including banks need to maintain their financial soundness and stability as they play an important role in the economy. Thus, this study was conducted to examine the influence of asset quality indicators variables and macroeconomic factors such as Loan to Deposit Ratio (LTDR), Total Loan to Total Asset (TLTA), Non-Performing Loan (NPL), Gross Domestic Product (GDP), Inflation (INF) and Money Supply (M3) on the Financial Performance of Malaysian Islamic banks. By using E-Views 12 software and SPSS 21, the data obtained from the year 2012 until 2021 then is evaluated and interpreted. The Multiple Regression Analysis was conducted in order to examine the factors that influencing the financial performance of Malaysian Islamic banks. The findings from this study revealed that two variables were found to be insignificant with the financial performance of Malaysian Islamic banks which are LDTR and TLTA. While four variables were found to be significant with the financial performance of Malaysian Islamic banks which are NPL, GDP, INF and M3. The result of this study is expected to be used as reference in further researches as it helps other researchers to better understand the Islamic bank performance determinants. Furthermore, bank managers could use this study as a guideline in managing and planning their business to achieve higher profit. This study also provides knowledge regarding the Islamic banking sector and clearer picture on Malaysian financial performance of Islamic banks to the readers.

Keyword: Islamic Banks, Financial Performance, Money Supply, Asset Quality, Total Loan to Total Asset, Loan to Deposit Ratio, Multiple Regression Analysis

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LIST OF ABBREVIATIONS

AIBIM	Association of Islamic Banking Institution Malaysia
BIMB	Bank Islam Malaysia Berhad
BMMB	Bank Muamalat Malaysia Berhad
BNM	Bank Negara Malaysia
CIMB	Commerce International Merchant Bankers
CPI	Consumer Price Index
FEM	Fixed Effect Model
FP	Financial Performance
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
IFSB	Islamic Financial Services Board
LTDR	Loan-to-Deposit-Ratio
TLTA	Total Loan to Total Asset
NPL	Non-Performing Loans
INF	Inflation
M3	Money Supply
GDP	Gross Domestic Product
MENA	Middle East and North America

NEAC	The National Economic Action Council Ministry of Finance
OLS	Ordinary Least Square
PLS	Profit-Loss Sharing
ROA	Return on Asset
REM	Random Effect Model
ROA	Return on Asset
FSR	Financial Stability Review
DFIs	Development Financial Institutions
SEA	South East Asia
VIF	Variance Inflation Factor



CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study examines how asset quality metrics and external factors affect Malaysian Islamic banks' financial performance. The issue statement and research background are covered in this section. Reviewing the study's research question, objective, importance, and limits. The inaugural subsection will furnish the necessary contextual information, while subsection 1.2 will address the issue. Subsections 1.3 and 1.4 will explain the research topic and objectives.

1.1 Background of Study

The efficacy of the financial system affects Islamic financial performance. According to Samail, Zaidi, Mohamed, and Kamaruzaman (2018), a nation's financial performance affects its economy. Financial performance is the act of engaging in economic activity. Abu Bakar and Aduda (2017) define financial performance as meeting financial objectives. It is how a company's operations and policies are valued. It is used in the process of determining how a company has fared financially over some time. It may compare comparable businesses across industries or sectors.

In July 1983, Bank Islam Malaysia Berhad (BIMB) was founded, launching Malaysia's Islamic financial sector. BIMB conducts banking operations similarly to other commercial institutions with Islamic laws as guidance. Bank Muamalat Malaysia

REFERENCES

- Athanasoglous, P. P., Delis, M. D. & Staikouras, C. K. (2008). Determinants of bank profitability in the South Eastern European region. *Working Paper (47), Bank of Greece*, 1-31.
- Al-Qudah. & Jaradat. (2013). The impact of macroeconomic variables and banks characteristics on Jordanian Islamic banks profitability: Empirical evidence, international business research. *Canadian Center of Science and Education*, 6 (10).
- Abrar, T., Ahmed, F., & Kahfi, M. (2018). Financial Stability of Islamic versus Conventional banks in Pakistan. *Journal of Islamic Economics*, 10(2), 341-366.
- Abdulazeez Y. H., Asish Saha, A., & Md-Rus, R. (2017). Profitability of Saudi Commercial Banks: A Comparative Evaluation between Domestic and Foreign Banks using Capital Adequacy, Asset Quality, Management Quality, Earning Ability and Liquidity Parameters. *International Journal of Economics and Financial*, 7(2), 477-484.
- Aspirantia, T., Abdul Hadib, A. R., Amaliahc, I., & Mafruhadt, A.Y. (2019). Non-Performing Financing and Asset Quality: Evidence from Indonesian Islamic Bank. *International Journal of Innovation, Creativity and Change*, 10 (6).
- AsadUllah, M.,Khanzada, A., & Uddin, I. (2017). Capital Structure and Islamic Banks' Performance. *Department of Accounting and Finance, Institute of Business Management*.
- Asadullah, M. (2017). Determinants of Profitability of Islamic Banks of Pakistan—A Case Study on Pakistan's Islamic Banking Sector. *International Conference on Advances in Business and Law (ICABL)*, 1(1), 61-73.

- Amzal, C. (2016). The Impact of Macroeconomic variables on Indonesia Islamic Banks Profitability. *JEBIS*, 2(1), 71-86.
- Ali, Q., Maamor, S., Yaacob, H., and Tariq Gil, M.U. (2018). Impact of Macroeconomic Variables on Islamic Banks Profitability. *Journal of Accounting and Business Research*, 1 (2).
- Ali, M.A., Shuib, M.S., & Mat Nor, A. (2021). Protection of Bank's Wealth: How is Islamic Banks's Financial Performance Affected by Asset Quality and Operational Efficiency. *Journal of Accounting and Finance*, 9(4), 745-756.
- Akhtar, S., & Ahmad, N. H. (2016). Effect of Asset Quality, Income Structure and Macroeconomic Factors on Insolvency Risk: An Empirical Study on Islamic Banking System of Pakistan. *Pakistan Journal of Social Sciences (PJSS)*, 36 (1), 63-73.
- Alghfais, M. (2017). A Comparative Study Between Islamic and Conventional Banks - The Case of Saudi Arabia: A Binary Logistic Regression Approach.
- Ali, K., Akhtar, M. F., & Ahmed, H. Z. (2011). Bank-Specific and Macroeconomic Indicators of Profitability – Empirical Evidence from the Commercial Banks of Pakistan. *International Journal of Business and Social Science*, 2(6), 235- 242.
- Al-Tamimi, H. A. H. (2010). Factors Influencing Performance of the UAE Islamic and Conventional National Banks. *Global Journal of Business Research*, 4(2), 1-9.
- Abubakar, A. S., & Aduda, J. (2017). Islamic Banking and Investment Financing: A Case of Islamic Banking in Kenya. *International Journal of Finance*, 2(1), 66-87.
- Abrar, T., Ahmed, F., & Kahfi, M. (2018). Financial Stability of Islamic versus Conventional banks in Pakistan. *Journal of Islamic Economics*, 10(2), 341-366.

- Aziz, N.I.M. (2017). Islamic Banking Profitability: Roles Played by Internal And External Banking Factors. *JMFIR*, 14(1).
- Al-Shaghdari, F., & Bardai, B. (2020). Empirical Analysis on The Influence of Internal And External Parameters of Islamic Banks Financial Performance: Evidence from Malaysia. *IJCIRAS*, 3(5), 2581-5334.
- Abugamea, Gaber. (2018). Determinants of Banking Sector Profitability: Empirical Evidence from Palestine. *Journal of Islamic Economics and Finance*, 4(1), 49-67.
- AIBIM. (2021). First case of Malaysian positive for coronavirus. Retrieved from <https://aibim.com/news/bank-rakyat-gives-moratorium-on-RM6-bil-loan-repayments> Bernama.
- Bashir, A. M. (1999). Risks and profitability measures of Islamic banks: The case of two Sudanese banks. *Islamic Economics Studies*, 6(2), 1-24.
- Beck, T., Demirgüç-Kunt, A. and Levine, R. (2000). A New Database on Financial Development and Structur. *World Bank Economic Review*, 14, 597-605.
- Beck, T., Demirguc-Kunt, A., & Merrouche, O. (2013). Islamic Vs. conventional banking: Business model, efficiency and stability. *Journal of Banking and Finance*, 433-447.
- Creswell, J. W. (2008). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. *Pearson Education, Inc.* (4).
- Chowdhury, M. A. F. and Mohd Rasid, M. E. S. (2017). Determinants of performance of Islamic banks in GCC countries: Dynamic GMM approach. *Advances in Islamic Finance, Marketing, and Management*, 49-80.

- Chakroun, M. A., & Gallali, M. I. (2015). Islamic Banks and Financial Stability: An Empirical Analysis of the Gulf Countries. *International Journal of Business and Commerce*, 5(03), 64-87.
- Dusuki, A. W. and Bouheraoua, S. (2011). The framework of maqās.id al-sharī'ah and its implication for Islamic finance. *Islam and Civilization Renewal Journal*, 2(2), 316-336.
- Faizah, I. and Burhany, D. (2019). Assets Quality and Capital as Risk and Profitability Determinants in Banking Industry. *International Conference on Creative Economics, Tourism and Information Management*, 198-204.
- Fajriati, L.A., Rahman, A.A., & Maharani, S. (2021). Effect Of Financing to Deposit Ratio and Non-Performing Financing of Return on Assets with A Capital Adequacy Ratio as Variable Intervening in Islamic Banking In Indonesia In 2012-2019. *Journal Of Economics and Business Research*, 1(2), 268-302.
- Flamini, V., Mcdonald, C. & Schumacher, L. (2009). The determinants of commercial bank profitability in Sub-Saharan Africa. *IMF Working Paper*.
- FitchConnect Database. (2023). Fitch Solutions Group Incorporation. Retrieved from <https://app.fitchconnect.com>.
- Hosen, M. (2017). Determinants of Islamic bank Asset Quality and Profitability: A Cross- sectional study on MENA Countries.
- Hamza, H., & Saadaoui, Z. (2018). Monetary transmission through the debt financing channel of Islamic banks: Does PSIA play a role. *Research in International Business and Finance*, 45, 557-570.
- Hassan, M. K., & Bashir, A. H. M. (2003). Determinants of Islamic banking profitability. 10th ERF annual conference, Morocco, 7, 2-31.

- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis (7)*. Harlow: *Pearson Education Limited*.
- Hidayat, I., Alwahidin and Aspiani, T. (2020). The Effect of Inflation, Interest Rate, and Gross Domestic Products on The Profitability of Sharia Banking in Indonesia. *Journal Industrial Engineering & Management Research*,1(4).
- Islamic Financial Services Board. 'Islamic Financial Services Industry Stability Report 2021', Retrieved from: <https://www.ifsb.org>.
- Idris, A. R., Asari, F. F. A. H, Taufik, N. A. A., Salim, N. J., Mustaffa, R. & Jusoff, K. (2011). Determinants of Islamic banking institutions' profitability in Malaysia. *World Applied Sciences Journal*, 12, 1-7.
- Jaafar, M. and Manarvi, I. (2011). Performance comparison of Islamic and Conventional banks in Pakistan. *Global Journal of Management and Business Research*, 11 (1), 60-66.
- Joya, J. (1994). *Dasar kewangan dan inflasi: Satu kajian empirikal di Malaysia*. Ph.D. thesis, Bahagian Ekonomi Gunaan, *Fakulti Ekonomi dan Pentadbiran*, Universiti Malaya.
- Khan, M. S. (1986). Islamic Interest-Free Banking: A Theoretical Analysis. *International Monetary Fund*, 33(1), 1-27.
- Kosmidou, K., & Zopounidis, C. (2002). An Optimization Scenario Methodology For Bank Asset Liability Management. *Operational Research*, 2(2), 279.
- Krishna, B., Lingam, S., Mala, A., & Sen, R. (2021). Determinants Of Bank Profitability:Empirical Evidence from A Pacific Small Island Developing State. *Humanities & Social Sciences Reviews*, 9(3),16-29.
- Lassoued, M. (2018). Corporate Governance and Financial Stability in Islamic banking. *Managerial Finance*, 44(5), 524-539.

- Leland, H. E., & Pyle, D. H. (1977). Informational Asymmetries, Financial Structure, and Financial Intermediation. *The Journal of Finance*, 32(2), 371-387.
- Nagaraju, Y., & Boateng, K. (2018). Profitability determinants of savings and loans companies in Ghana: Evidence on Bank Specific and macroeconomic Determinants. *International Journal of Management Studies*, 5(2), 2.
- Nugroho, L., Nugraha, E., Badawi, A., & Putra, Y.M. (2021). Comparative Analysis Of The Effect of Loan/Financing to Deposit Ratio, Labor Costs Growth and Promotion Costs Growth to Returns on Assets In Islamic Banks And Conventional Banks In Indonesia. *International Journal of Commerce and Finance*, 7(2), 21-49.
- Milhem, M.M. & Rasha M. S. (2015). Financial Performance of Islamic And Global Conventional Banks: Evidence from Jordan. *Journal of Business Research*, 9(3), 27-41.
- Metzler, L. A. (1951). Wealth, Saving, and the Rate of Interest. *Journal of Political Economy*, 59(2), 93-116
- Mallin, C., Farag, H. and Ow-Yong, K. (2014). Corporate Social Responsibility And Financial Performance in Islamic Banks. *Journal of Economic Behavior and Organization*, 103, 21-38.
- Moody's Investors Services. (2021). Retrieved from <https://www.theedgemarkets.com/flash-categories/edge-weekly>.
- Ozurumba, B. A. (2016). Impact of non-performing loans on the performance of selected commercial banks in Nigeria. *Research Journal of Finance and Accounting*, 7(16), 95-109.
- Ong, C. H. and Chen, P. Y. (2014). The effects of IT: From performance to value. *Industrial Management & Data Systems*, 114(1), 70-85.

- Oduor, J., Ngoka, K., & Odongo, M. (2017). Capital requirement, bank competition and stability in Africa. *Review of Development Finance*, 1-7.
- Obeidat, B.Y., El-Rimawi, S.Y., Masa'deh, Maqableh, M.M., and Al-Jarrah, I.M. (2013). Evaluating the Profitability of the Islamic Banks in Jordan. *European Journal of Economics Finance and Administrative Sciences*, 56.
- Pallant, J. (2010). SPSS Survival Manual (4). Berkshire, England: McGraw-Hill.
- Prima Sakti, M. R. P. and Mohamad, A. (2018). Efficiency, stability and asset quality of Islamic vis-à-vis conventional banks; Evidence from Indonesia. *Journal of Islamic Accounting and Business Research*, 9(3), 378-400.
- RAM Rating Services Bhd. (2021). RAM Ratings: Islamic banks driving Malaysian Banking sector growth. Retrieved from: <https://www.ram.com.my/pressrelease/?prviewid=4547>.
- Ramzan, M., & Zafar, M. I. (2014). Liquidity Risk Management in Islamic Banks: a Study of Islamic Banks of Pakistan. *Interdisciplinary Journal of contemporary Research in Business*, 5(12).
- Ravichandran, T., Liu, Y., Han, S. and Hasan, I. (2009). Diversification and firm performance: Exploring the moderating effects of information technology spending. *Journal of Management Information Systems*, 25(4), 205-240.
- Ramlan, H., & Adnan, M. S. (2016). The profitability of Islamic and conventional bank: Case study in Malaysia. *Procedia Economics and Finance*, 35, 359-367.

- Samail, N. A., Zaidi, N. S., Mohamed, A. S. and Kamaruzaman, M. N. (2018).
Determinants of financial performance of Islamic banking in Malaysia.
International Journal of Academic Research in Accounting, Finance and Management Sciences, 8(4), 21–29.
- Sufian, F., and Kamarudin, F. (2015). Determinants of revenue efficiency of Islamic banks: Empirical evidence from the Southeast Asian countries. *International Journal of Islamic and Middle Eastern Finance and Management*, 8(1), 36–63.
- Samad, A (2004). Performance of Interest-free Islamic banks vis-à-vis Interest-based Conventional Banks of Bahrain, *Journal of Economics and Management*, 12(2).
- Samail, N. A. B., Zaidi, N. S. B., Mohamed, A., & Kamaruzaman, M. B. (2018).
Determinants of Financial Performance of Islamic Banking in Malaysia.
International Journal of Academic Research in Accounting, Finance and Management Sciences, 8(4), 21-29.
- Smaoui, H., & Salah, I. B. (2012). Profitability of Islamic banks in the GCC region. *Global Economy and Finance Journal*, 5(1), 85-102.
- Sufian, F., & Habibullah, M. S. (2009). Bank specific and macroeconomic determinants of bank profitability: Empirical evidence from the China banking sector. *Frontiers of Economics in China*, 4(2), 274-291.
- Samad A. and Hassan M. K. (1999) “The Performance of Malaysian Islamic Bank During 1984-1997, An Exploratory Study”, *International Journal of Islamic Financial Services*, 1(3), 1-14.
- Serly, V., & Handayani, F.D. (2020). Efficiency, Asset Quality and Stability: Comparative Study of Conventional Banks and Islamic Banks in Southeast Asia. *Advances in Economics, Business and Management Research*, 124.

- Suleiman, Y. D., & Hakim, S. (2021). Liquidity Risk Determinants: A Comparative Study of Islamic and Conventional Banks in Saudi Arabia. *Palarch's Journal of Archaeology of Egypt/Egyptology*, 18(12), 312-322.
- Sufian, F., & Chong, R.R. (2008) Determinants of Bank Profitability in A Developing Economy: Empirical Evidence from The Philippines. *Asian Academy of Management Journal of Accounting and Finance*, 4(2), 91–112.
- Said, F.F., & Ismail, A.G. (2007). How does the changes a monetary policy affected lending Behaviour of Islamic Banking in Malaysia. *Journal Development of Economic*, 12(3),167-177.
- Salike, N. and Ao, B. (2018). Determinants of bank's profitability: Role of poor asset quality in Asia. *China Finance Review International*, 8(2), 216-231.
- Sulaiman, A.A., Mohamad, M.T., & Arishin, S.S.A. (2018). Determinants of the Asset Structure of Malaysian Islamic Banks: A Panel Study. *New Developments in Islamic Economics*, 181–195.
- Wasiuzzaman, S., & Nair Gunasegavan, U. (2013). Comparative study of the performance of Islamic and conventional banks: The case of Malaysia. *Humanomics*, 29(1), 43-60.
- World Bank. (2022). DataBank: World Development Indicators. Retrieved from World Bank Group: <https://databank.worldbank.org/data/source/world-development-indicators>.

APPENDIX I

AVERAGE OF FINANCIAL PERFORMANCE (ROA OF MALAYSIAN ISLAMIC BANKS)

NO.	BANKS	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)	2020 (%)	2021 (%)	AVERAGE
1	AFFIN ISLAMIC	0.67	0.53	0.58	0.66	0.78	0.51	0.49	0.26	0.23	0.71	0.542
2	AL RAJHI	0.22	0.04	0.07	0.16	0.09	0.12	0.14	0.42	-0.95	0.15	0.046
3	ALLIANCE ISLAMIC	0.82	0.76	0.72	0.55	0.78	0.82	0.99	0.57	0.05	0.87	0.644
4	AM ISLAMIC	0.89	0.72	0.67	0.6	0.71	0.63	0.78	0.79	0.25	0.36	0.64
5	BIMB	1.23	1.19	1.18	1.07	1.05	1.03	1	0.97	0.82	0.71	1.018
6	BMMB	0.87	0.76	0.42	0.6	0.66	0.79	0.77	0.57	0.71	0.61	0.676
7	CIMB ISLAMIC	0.86	0.71	0.79	0.74	0.9	0.86	0.9	0.76	0.45	0.72	0.769

8	HSBC AMANAH	8.56	8.08	8.05	7.51	9.33	9.09	8.96	9.28	11	10.34	9.017
9	HONG LEONG ISLAMIC	1.08	1.07	0.88	0.82	0.84	0.96	1.01	0.94	0.92	0.62	0.914
10	KFH	0.67	1.09	0.94	-0.36	-0.27	0.05	0.22	-0.84	-0.15	0.92	0.227
11	MBSB	-0.27	0.28	0.51	0.02	0.14	-0.15	1.15	0.97	0.5	0.88	0.403
12	MAYBANK ISLAMIC	1.09	0.99	0.86	0.8	0.79	0.92	0.94	1.07	0.6	1.16	0.922
13	OCBC ALAMIN	0.69	1.25	0.58	0.93	1	1.23	0.83	0.99	0.43	0.52	0.845
14	PUBLIC ISLAMIC	1.4	1.12	0.98	0.81	0.83	0.76	0.79	0.75	0.5	0.76	0.87
15	RHB ISLAMIC	0.64	0.61	0.72	0.64	0.69	0.69	0.73	0.83	0.43	0.85	0.683
16	STAND CHART SAADIQ	0.73	0.63	0.11	0.13	0.32	0.27	0.54	0.61	0.12	-0.38	0.308

APPENDIX II

DIAGNOSTIC TEST FOR ISLAMIC BANKS IN MALAYSIA

White test for Heteroscedasticity

Heteroskedasticity Test: White

Null hypothesis: Homoskedasticity

F-statistic	1.473535	Prob. F(25,134)	0.0840
Obs*R-squared	34.50126	Prob. Chi-Square(25)	0.0976
Scaled explained SS	192.7315	Prob. Chi-Square(25)	0.0000

Auto-Correlation test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	241.2227	Prob. F(2,151)	0.0000
Obs*R-squared	121.8594	Prob. Chi-Square(2)	0.0000

Panel Data Test

Redundant Fixed Effects Tests Equation:

Untitled

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	297.042032	(15,138)	0.0000
Cross-section Chi-square	560.827561	15	0.0000

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effect

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	6	1.0000

Multiple Regression Analysis for Islamic banks in Malaysia

Dependent Variable: FP

Method: Panel EGLS (Cross-section weights)

Date: 05/13/23 Time: 09:31

Sample: 1 160

Periods included: 10

Cross-sections included: 16

Total panel (balanced) observations: 160

Linear estimation after one-step weighting matrix

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.093673	0.601569	0.155714	0.8765
LTDR	-0.001440	0.001033	-1.394448	0.1654
TLTA	0.516913	0.573908	0.900688	0.3693
NPL	-0.048104	0.021152	-2.274185	0.0245
GDP	0.030790	0.007102	4.335562	0.0000
INF	-0.035483	0.015308	-2.317977	0.0219
MS	9.987397	4.135457	2.415065	0.0170

Effects Specification

Cross-section fixed (dummy variables)

Weighted Statistics

R-squared	0.885046	Mean dependent var	1.516391
Adjusted R-squared	0.867553	S.D. dependent var	1.046884
S.E. of regression	0.336163	Sum squared resid	15.59478
F-statistic	50.59423	Durbin-Watson stat	1.636934
Prob(F-statistic)	0.000000		

Unweighted Statistics

R-squared	0.966595	Mean dependent var	1.161437
Sum squared resid	23.11234	Durbin-Watson stat	1.032334





