

## SHORT-RUN AND LONG-RUN RELATIONSHIP OF ISLAMIC HOME FINANCING IN MALAYSIA: ANALYSIS ON ISLAMIC BANKS

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### ABSTRACT

Islamic home financing is a service offered by Islamic banks according to the Islamic principle. In Malaysia, it has been offered since the early 1980s. The demand for Islamic home financing in Malaysia has increased over time. Therefore, this study would like to delve into the short-run and long-run relationship between the factors involved in Islamic home financing. Past studies highlighted the microeconomic factors and macroeconomic factors in Islamic banks that contribute to the growth of Islamic home financing in Malaysia. Thus, this study would include four factors comprised of deposits, liabilities, GDP, and government expenditure. Deposits and liabilities are categorized into microeconomic factors, whereas GDP and government expenditure are macroeconomic factors. The first objective is to identify the short-run and long-run relationship between the factors mentioned above on Islamic home financing in Malaysia. The second objective is to analyze the causality effects of the factors on Islamic home financing in Malaysia. The methodology comprises of quantitative research design. Data collection is based on secondary data collection, which was retrieved through documentation review and statistical highlights from Bank Negara Malaysia. The data comprise the first quarter of 2010 until the second quarter of 2021. Analysis data is conducted through an econometric approach within time series data which is the ARDL test and Granger causality test. The findings of this study would emphasize the importance of microeconomic factors and macroeconomic factors on Islamic home financing. It would encourage the supply and growth of Islamic home financing by Islamic banks in Malaysia in the future.

### INTRODUCTION

A home or house is an important necessity for humans. However, owning a house in the current economic condition might be tough. The economic condition and house price in the country plays a crucial part in home ownership. The price of a house

is high, especially in urban and suburban areas. It leads to services such as home loans or home financing offered by banks. Malaysia has a unique structure regarding the organization of property financing (Wei & Said, 2021). Home loans or home financing is introduced by the financial sector, especially banking sector. Home loan is offered by conventional banks, and Islamic home financing is offered by Islamic banks. Islamic home financing is Islamic-based financing which is in line with the principle of Islam. It is free from prohibited elements in trading, such as *riba*, *gharar*, and *maysir*. Islamic home financing in Malaysia is offered by concepts such as *ijarah*, *bay' bithaman ajil* (BBA), and *musyarakah mutanaqisah* (Aliyu et al., 2017). In Malaysia, Islamic home financing is widely accepted by the public. The increasing supply of Islamic home financing in Malaysia is shown in the graph below:

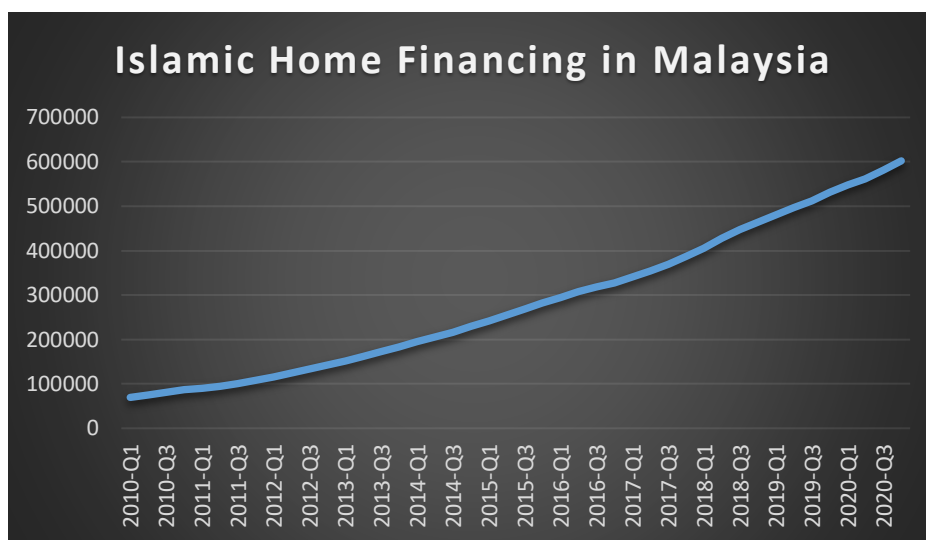


Figure 1. Islamic Home Financing in Malaysia Statistical Record in 2010-2020

Source: Bank Negara Malaysia (Retrieved, 1<sup>st</sup> July 2021)

Figure 1 displays the record of Islamic home financing in Malaysia from the year 2010 until 2020. The time span of ten years shows that the Islamic home financing rate is increasing over time. This matter leads to increased demand and supply for Islamic home financing in Malaysia. Although the establishment of Islamic home financing is later than a home loan, society has been widely accepted the services, and it is not solely for the Muslim community. Islamic home financing also relied on Islamic banks' operations on their assets and debts. Banks' assets, such as total deposits, would encourage the bank to invest more in supplying home financing services. Meanwhile, banks' debts, such as liabilities, would limit the services of banks.

Moreover, despite the growth of Islamic home financing, conventional home loans in Malaysia still recorded the highest income, and the supply is higher than Islamic home financing in Malaysia, as the study from Fah and Hassani (2014) stated that conventional banks in Malaysia are more profitable than Islamic banks. Therefore, in order to improve the supply and efficiency of Islamic home financing in Malaysia,

the factors influencing Islamic home financing need to be analyzed. Accordance to this fact, this paper would like to investigate the factors that influence the growth of Islamic home financing in Malaysia. The objective of this paper is to identify the microeconomic and macroeconomic factors in Islamic home financing in Malaysia. The second objective is to analyze the causality effects of the factors on Islamic home financing in Malaysia.

## **LITERATURE REVIEW**

The Islamic financing behaviour is consistent with conventional lending behaviour that the Islamic bank financing operates (Zulkhibri, 2018). Currently, bank financing is being shifted from financing for businesses to financing for households (Nizar & Karim, 2021). As the factors or determinants of Islamic home financing in Malaysia were not explicitly discussed in previous studies, this section will delve into the factors influencing the lending growth of banking in Malaysia. Previous studies on lending growth are significant, with this study identifying the factors that may contribute to the growth of Islamic home financing in Malaysia. Factors that may influence Islamic home financing in Malaysia can be categorized into two, which are; microeconomic and macroeconomic.

The term microeconomic refers to the unique aspect of a bank. It is usually called internal factors, such as bank size, capitalization, capital ratio, and so on (Adebola et al., 2011). On the other hand, macroeconomics refers to a wider aspect. Usually, it has a relation to a nation or country. Examples of macroeconomics are inflation rate, exchange rate, economic growth, and so on.

According to Md Isa et al. (2019), internal factors that significantly contribute to banks' lending in Malaysia consist of the volume of deposits, total assets, and banks' size (Athanasoglou et al., 2008). Loan enhancement in banking is significantly influenced by deposit volume (Deniz, 2022). It is in line with Adeboye (2009), who emphasize that internal factors such as deposits, total loans and advance, reserves, and bank assets are the component that influences housing financing in Nigeria. Rahman et al. (2018) defined the character of the home loan based on the deposit paid and debt service ratio. Meanwhile, total bank financing will be negatively affected by bank size (Ayagre et al., 2022). Therefore bank size is not used in this study.

Other than internal factors, macroeconomic factors also proved to be significantly influencing lending growth in Islamic banks during the global financial crisis. The study on macroeconomic factors proved that GDP and government expenditure have a positive relationship with lending growth in Islamic and conventional banks (Deniz, 2022; Ibrahim & Rizvi, 2018; Ma'in et al., 2016). GDP also displays a significant and positive relationship on Islamic home financing in a stable economy (Shukor et al., 2016; Yusof et al., 2011). Otherwise, Islamic bank financing can also support economic growth (Alrawahdeh & Zyadat, 2021; Ayoub & Mifma, 2021; Hussain et al., 2021). Yee (2022) found a long-term dynamic relationship between

gross domestic product, foreign direct investment, international trade, and inflation in explaining the importance of Malaysian Islamic banking financing. A two-way causality relationship is found between Islamic bank deposits and GDP in Malaysia, but the causal impact of Islamic bank financing on GDP is weak (Gani & Bahari, 2021). High household debt will reduce economic growth. Although household debt reduces growth, households still play an important role as a means of increasing consumption and aggregate output (Samad et al., 2022). However, other macroeconomic factors, such as inflation rate and policy rate, have no significant relationship or effect on a bank's lending growth (Deniz, 2022).

Based on previous studies, this study would choose four variables of factors. The factors are deposits, liabilities, GDP, and government expenditure (EXP). The addition of liabilities as a variable would set this study apart from previous studies. It is because liabilities are one of the factors in Islamic banks, and it is considered one of the elements that banks are monitoring in general. It would be one of the novelties of this study to investigate whether liabilities would affect Islamic home financing in Malaysia.

## RESEARCH METHODS

The methodology of this study is divided into three categories comprise of research design, data collection method, and analysis data. The research design of this study is descriptive research design; meanwhile, the data collection method is based on secondary data. The secondary data used in this study consist of documentation review from past researches such as theses, journals, and articles related to the topic.

On the other hand, secondary numerical data used in this study are from Bank Negara Malaysia quarterly highlights statistics. The data approximately comprises of ten years duration from the first quarter of 2010 until the second quarter of 2021. The duration of ten years emphasized the changes in Islamic home financing and the factors influencing Islamic home financing through the global economic condition, such as the great recession in 2010 and the COVID-19 pandemic at the end of 2019 and the year 2020. Therefore, the researcher would like to identify whether the global economic crisis affected the factors on Islamic home financing in Malaysia. There is 46 total observations involved in this study.

For analysis data, this study uses the quantitative data method. Analysis data is done through an econometric approach involving the usage of Eview11 software. The model of this study is constructed as below:

$$HF=f (DEPOSIT, LIAB, GDP, EXP)..... (1)$$

Where deposit stands for deposit in Islamic banks, LIAB represents liabilities in Islamic banks, GDP stands for the gross domestic product in Malaysia, and EXP stands for government expenditure.

Co-integration techniques is applied in this study. Co-integration techniques were used to estimate the interaction between Islamic home financing and four other independent variables such as deposits, liabilities, GDP and government expenditure. This study employed Autoregressive Distributed Lag cointegration technique (ARDL) to estimate the co-integration relationship among the variables (Gani, 2019). ARDL is used because of its abilities to overcome the obstacles in the variables omissions as well as the weakness of autocorrelation issues. In addition, the level of stationarity status between the variables in this study consists of 1(0) and 1(1) (Pesaran et al., 1999, 2001). The mixture of stationary status would implied the importance of ARDL test in this study. The model of this study is written as follows:

$$\Delta \ln(HF)_t = \alpha_0 + \lambda_1 \ln(DEPOSIT)_{t-i} + \lambda_2 \ln(LIAB)_{t-i} + \lambda_3 \ln(GDP)_{t-i} + \lambda_4 \ln(EXP)_{t-1} + \sum_{i=1}^p \beta_1 \Delta \ln(DEPOSIT)_{t-i} + \sum_{i=0}^p \beta_2 \Delta \ln(LIAB)_{t-i} + \sum_{i=0}^p \beta_3 \Delta \ln(GDP)_{t-i} + \sum_{i=0}^p \beta_4 \Delta \ln(EXP)_{t-i} + \varepsilon_t \dots\dots\dots (2)$$

Equation (2) defined the ARDL model in this study. p is the lag length and  $\Delta$  is the first difference operator. Whereas,  $\alpha$  represents the intercept,  $\lambda\beta_1$  to  $\lambda\beta_4$  is the coefficients and  $\varepsilon_t$  stands for the error correction term (ECT). When the co-integration among the variables has been identified, long-run estimation will take place, therefore the equation of long-run estimation is as follows:

$$\ln(HF)_t = \beta_0 + + \sum_{i=1}^p \beta_1 \Delta \ln(DEPOSIT)_{t-i} + \sum_{i=0}^p \beta_2 \Delta \ln(LIAB)_{t-i} + \sum_{i=0}^p \beta_3 \Delta \ln(GDP)_{t-i} + \sum_{i=0}^p \beta_4 \Delta \ln(EXP)_{t-i} + \varepsilon_t \dots\dots\dots (3)$$

Following that, this study will identify the short-run relationship of the variables. The short-run estimation equation is as below:

$$\ln(HF)_t = \beta_0 + + \sum_{i=1}^p \beta_1 \Delta \ln(DEPOSIT)_{t-i} + \sum_{i=0}^p \beta_2 \Delta \ln(LIAB)_{t-i} + \sum_{i=0}^p \beta_3 \Delta \ln(GDP)_{t-i} + \sum_{i=0}^p \beta_4 \Delta \ln(EXP)_{t-i} + \theta ECT_{t-1} + \varepsilon_t \dots\dots\dots (4)$$

ECT display the speed of adjustment or elaborate the speed of variables in achieving the equilibrium form in the long-run. ECT co-integration of the variables is defined when the coefficient values are significant and in negative form. This will be evidence of long-run causality in the model (Adebola et al., 2011). Next, is dynamic Granger causality is employed in this model. It is to show the direction of the causality of the variables (Mozumder & Marathe, 2007).

**RESULT AND ANALYSIS**

This section will be divided into three subtopics which is stationary test, estimation of long-run form and bound test, short-run relationship and diagnostic test, and Granger Causality test. The result based on the econometric approach will be presented with discussions regarding the findings.

**Stationary Test**

Stationary test of Augmented Dickey-Fuller (ADF) has been conducted in this study. The purpose of stationary test is to ensure the time series analysis able to be

forecast. As the non-stationary series data cannot be predicted, stationarity of data is an important factor in time series analysis.

Table 1  
Unit Root Test

| Philips-Perron test |           |                  |                     |
|---------------------|-----------|------------------|---------------------|
| Variables           | Level     | First Difference | Stationarity Status |
| LHF                 | -0.417    | -3.911**         | I(1)                |
| LDEPOSIT            | -2.114    | -4.954***        | I(1)                |
| LLIAB               | -1.871    | -5.394***        | I(1)                |
| LGDP                | -2.630    | -8.419***        | I(1)                |
| LEXP                | -4.334*** | -12.489***       | I(0)                |

Source: Data Processed

Notes: Lag lengths are selected based on Akaike Info Criterion, the test statistics are based on critical values from McKinnon (1973); \*\*\*, \*\* and \* denotes significance at 1%, 5% and 10% respectively

The unit root test on the Table 1 used Philips-Perron test to determine the stationarity of the variables used in this model. As a result, home financing, deposit, liabilities, GDP and government expenditure are stationary at level and first difference. Home financing, deposit, liabilities and GDP are stationary at first difference (I(1))at 5% level. Meanwhile, government expenditure is at level difference (I(0))at 5% level. This justified the next step of analysis which is ARDL co-integration approach. This study includes bound test to identify the long-run co-integration of variables consisting deposit, liabilities, GDP and government expenditure on Islamic home financing.

### Estimation of Long-run Form and Bound Test, Short Run Relationship and Diagnostic Test

Table 2  
Bound Test Result

|                        |       |      |
|------------------------|-------|------|
| Computed F-Statistic   | 6.757 |      |
| Critical Bounds (k=4)  |       |      |
| Levels of Significance | I(0)  | I(1) |
| 1%                     | 3.29  | 4.37 |
| 5%                     | 2.56  | 3.49 |
| 10%                    | 2.2   | 3.09 |

Source: Data Processed

Notes: Lag lengths are selected based on Akaike Info Criterion, the test statistics are based on critical values from McKinnon (1973); \*\*\*, \*\* and \* denotes significance at 1%, 5%, and 10% respectively

Table 2 displays the result of bound test of long-run co-integration. It is confirmed that value of computed F-statistics in this model is higher than upper bound critical value of 5% (6.757>3.49). As the F- statistic is higher than upper bound critical, the factors in this model comprise of deposit, liabilities, GDP and government

expenditure have a long-run equilibrium relationship on Islamic home financing in Malaysia. The existence of long-run equilibrium between the variables and Islamic home financing shows that both internal factors and macroeconomic factors have significant effect on Islamic home financing in Malaysia in the long-run. The long establishment of relationship between deposit, liabilities, GDP and government expenditure towards Islamic home financing exhibits the importance of these variables in contributing to the changes of Islamic home financing in Malaysia.

Next, researcher estimates the long-run relationship between the factors of Islamic home financing on Islamic home financing. The existence of long-run relationship is presented in the following table:

Table 3  
Long-run Estimation Result

| Regressors | Coefficients | t-Statistics |
|------------|--------------|--------------|
| LDEPOSIT   | 1.017        | 1.376        |
| LLIAB      | -0.087       | -0.095       |
| LGDP       | 0.888        | 1.838        |
| LEXP       | -0.219       | 0.485        |

Source: Data Processed

Note: \*\*\*, \*\*, \* represent statistical significance level at 1%,5%, and 10% respectively, ARDL (2,0,4,1,1) is selected based on AIC

Table 3 displays the long-run estimation result of the model. The result shows that none of the variables have a long-run relationship with Islamic home financing in Malaysia in the long-run term. Deposit, liabilities, GDP, and government expenditure may show a long-run co-integration relationship as stated in the previous bound test result. However, based on the long-run estimation, specifically, every variable in this study does not have a long-run effect on Islamic home financing in Malaysia. It is in contrast with studies by Md Isa et al. (2019) which stated that the volume of deposits significantly contributed to bank lending in Malaysia. On the other hand, Adeboye (2009) also highlighted that deposit is one of the factors that influence home financing in Nigeria. However, the findings of this study do not support the theory of both previous studies, as the deposit did not exhibit a significant relationship on Islamic home financing in Malaysia in the long-run.

The result of this study exhibits different effects of internal factors and macroeconomic factors towards Islamic home financing in Malaysia in the long run is based on the period of study. The influence that involves period of study might influence the relationship of these variables considering the changes that happened within the period of time. In addition, the changes of these variables would not affect Islamic home financing in Malaysia in the long run. This result indicates that from the first quarter of 2010 until the second quarter of 2021, the changes of deposits, liabilities, GDP, and government expenditure would not affect the changes in Islamic home financing in Malaysia. These results are supported by previous research by Hachicha and Ben Amar (2015) which states that GDP in Malaysia is not sensitive to Islamic financing. However, this result might change depending on the study period

and the other factors involved, such as the pandemic situation. Although studies from Arafat et al. (2021) emphasized that both conventional banks and Islamic banks in Malaysia, Pakistan, and GCC regions, such as Bahrain, Kuwait, Qatar, and United Arab Emirates, were affected during the pandemic despite there being no proof of the impacts on the stability of the banks. However, the authors stated that the crisis during the COVID-19 pandemic was much more severe than Global Financial Crisis in 2008. As the economic situation during the pandemic is not in the best condition, this might affect the impact of the factors on Islamic home financing in Malaysia in the long-run. These results are supported by previous research by Mohd Yusof et al. (2018) which states that, economic shocks to have a long-term effect on home financing in both conventional and Islamic banks.

Table 4  
Diagnostic Test Result

|                            |               |                       |
|----------------------------|---------------|-----------------------|
| Serial Correlation LM Test | 0.129 [0.970] | Breusch-Godfrey       |
| Normality Test             | 1.570 [0.456] | Jarque-Bera           |
| Heteroskedasticity Test    | 0.537 [0.850] | Breusch-Pagan-Godfrey |

Source: Data Processed

Note: \*\*\*, \*\*, \* represent statistical significance level at 1%, 5% and 10% respectively, ARDL (2,0,4,1,1) is selected based on AIC

Table 4 presents the diagnostic test result. To determine there is no issue in the model, the value of F-Statistic for LM test, normality test, and heteroskedasticity test must be higher than 5% significance level. It demonstrated that there is no element of serial correlation based on the residuals of data in the model. The result is based on F-statistic value in Langrange Multiplier (LM Test), where the value of 0.129 is greater than 5% significance level. The Jarque-Bera normality test is 1.570, which is also higher than 5% significance level. The result indicates that the data in this model is normally distributed. Heteroskedasticity test is based on Breusch-Pagan-Godfrey test. The final result shows that there is no heterokedasticity issue in the data as the probability of F-statistic record 0.537, which is above than 5% significance level. The result indicates that the data used in this study is appropriate to be tested as it would not cause spurious and imbalanced results. This would bring us to conclusion that the data involved in this model is reliable and unbiased.

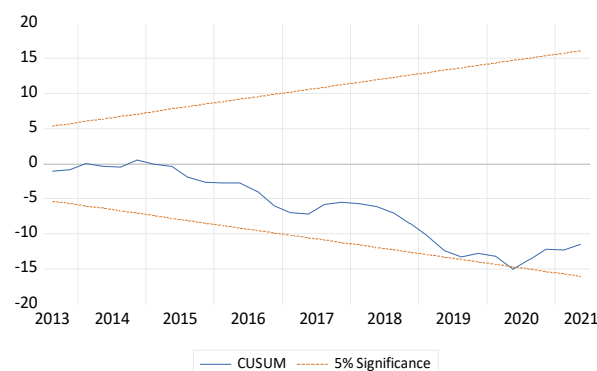


Figure 2. CUSUM Graph



Source: Data Processed

Figure 2 exhibits the result of CUSUM test which is implied to measure the stability of data. The blue line in the graph is not exceeding the red line, although it is close to reaching the boundaries. Based on CUSUM test result, it can be interpreted that the data is stable as the line is not reached outside the red line. This shows that the data is stable, and it is appropriate to be used in this study. The next graph shows the result of CUSUMSQ which is to identify the stability of data. CUSUMSQ test and CUSUM test purpose are the same, as both tests are conducted to test the data stability.

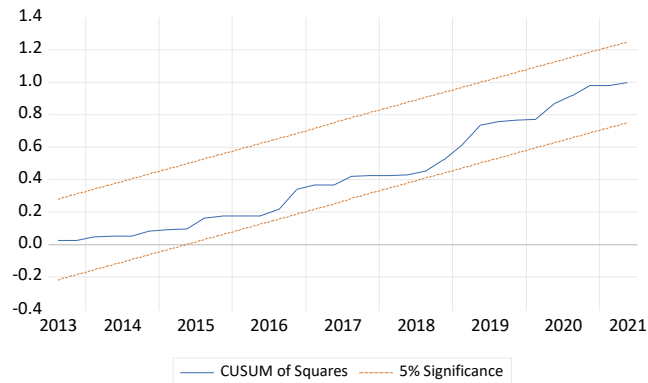


Figure 3. CUSUMSQ Graph

Source: Data Processed

The result of CUSUMSQ test in Figure 3 shows the graph line of the model. The stability test shows that the data is stable as the line is within the red line. As the blue line is not drifting outside the boundaries line, the stability of data based on CUSUMSQ is approved. Another interpretation of this result indicates that data used in this model can be able to make a good forecast and produce a reliable result. Therefore, it can be interpreted that this model was specified correctly, and the coefficients estimated are stable.

Table 5  
Short Run Estimation Result (ECM)

| Regressors | Coefficients | t-Statistics |
|------------|--------------|--------------|
| LHF        | 0.366***     | 4.150        |
| LGDP       | -0.043***    | -3.757       |
| LEXP       | 0.016**      | 0.417        |
| ECM (-1)   | -0.053***    | -6.846       |

Source: Data Processed

Note: \*\*\*, \*\*, \* represent statistical significance level at 1%,5% and 10% respectively, ARDL (2,0,4,1,1) is selected based on AIC

Table 5 shows short-run estimation results based on ECM test. Despite the fact that the variables do not have a long-run relationship on Islamic home financing in Malaysia, there are two variables that have a short-run relationship on Islamic home financing. The variables are GDP and government expenditure. Both variables are categorized into external factors or macroeconomic factors influencing Islamic home financing in Malaysia. Although both variables show a significant relationship on Islamic home financing, GDP exhibits a negative relationship towards Islamic home

financing. On the other hand, government expenditure shows a positive relationship on Islamic home financing in Malaysia in the short-run.

For instance, based on the results, Islamic home financing recorded 0.04% decrease when there are 1% changes in GDP. This result brings a different perspective on the interaction of GDP on Islamic home financing in Malaysia. The changes of GDP in the country usually give a positive reaction on financing services. However, in this study, GDP exhibits a negative reaction on Islamic home financing, and it shows that the increases of GDP in the country within the first quarter of 2010 until the second quarter of 2021 significantly decreases the value of Islamic home financing in Malaysia in short-run. The negative link between GDP and Islamic home financing in Malaysia might be based on the short-run period, and the changes of these variables can be in different conditions based on other factors that may contribute to different results. As the year of 2020, the country is affected by the pandemic, and the growth of Islamic home financing in this period is significant at its fast pace. This matter might give a rare result of how Islamic home financing is reacting on the changes of GDP in the country.

On the other hand, government expenditure has a positive relationship on Islamic home financing. Where, 1% change in government expenditure would bring an increase of 0.016% in government expenditure. It means that government expenditure would be used more to the enhancement of Islamic home financing in Malaysia. It emphasized the importance of government expenditure in Malaysia in promoting the growth of Islamic home financing services. As the government provides a good amount of expenditure to balance the economic condition in Malaysia, the financing services such as Islamic home financing can be enhanced, and the supply of Islamic home financing increased. It would bring an opportunity for Islamic home financing products to establish more in the society as well as the home ownership through an Islamic compliance contract.

On the other hand, the short-run estimation of this study exhibits the ECM result displays the value of error correction term which is -0.053%, and it is significant at level 1%. Thus, the adjustment of 5.3% of all deviations from the long-run equilibrium route would take place within one quarter.

Table 6  
Granger Causality Test Result

| Variables   | HF             | Deposit         | Liabilities     | GDP              | EXP   |
|-------------|----------------|-----------------|-----------------|------------------|-------|
| HF          |                | <b>5.387**</b>  | <b>8.243***</b> | 0.540            | 1.300 |
| Deposit     | 1.067          |                 | 2.647           | 0.791            | 0.360 |
| Liabilities | 0.403          | 1.528           |                 | 2.922*           | 0.055 |
| GDP         | <b>5.044**</b> | 2.920*          | 3.937*          |                  | 0.119 |
| EXP         | <b>6.521**</b> | <b>7.330***</b> | <b>7.268**</b>  | <b>12.259***</b> |       |

Source: Data Processed

Note: \*\*\*, \*\*, \* represent statistical significance level at 1%,5% and 10% respectively.

Pairwise granger causality test in the table above shows the causal relationship between the variables in the model. The result exhibits that seven causal relationships were found in this model based on a 5% significant value level. Deposits and liabilities have a causal relationship on Islamic home financing in Malaysia. This signifies that deposits and liabilities influence Islamic home financing in Malaysia. On the other hand, deposit and liabilities value can be used to forecast the value of Islamic home financing in the future. Based on this finding, it can be implied that internal factors such as deposits and liabilities are important variables that can influence Islamic home financing in Malaysia. The management of deposit and liabilities in Islamic banks need to be enhanced and systematically conducted by Islamic banks as these variables show a significant causal link on Islamic home financing directly.

Meanwhile, in other causal relationships, The result exhibits a significant link between Islamic home financing on macroeconomic factors, GDP, and government expenditure. Islamic home financing affects both GDP and government expenditure. It can be interpreted that Islamic home financing has an effect on external factors of economic as the value of Islamic home financing is useful to forecast the value of GDP in Malaysia and government expenditure in Malaysia. As the value of Islamic home financing. Hence, the growth of Islamic home financing in Malaysia is a contribution on macroeconomic factors, and it emphasizes that economic conditions are relatively influenced by the value of Islamic home financing in Malaysia.

On the other hand, liabilities exhibit a causality effect on home financing and government expenditure, respectively. This follows by GDP, which has a causality relationship on government expenditure. Based on the result, it can be implied that four variables comprise of home financing, deposits, liabilities, and GDP have a causal relationship on government expenditure. Therefore, government expenditure proved to be important factor influenced by internal factors such as deposits and liabilities in Islamic banks as well as GDP and Islamic home financing in Malaysia. The causal relationship between these variables on government expenditure indicates the importance of government expenditure. As the conclusion of Granger causality test, the interpretation and summary of this result show that internal factors are affecting Islamic home financing in Malaysia within the period of 10 years. Meanwhile, another causal link between these variables emphasized the importance of each variable on determining and forecasting other values in the future.

## **CONCLUSION**

In conclusion, this study's findings show that there is a co-integration link between deposits, liabilities, GDP, and government expenditure on Islamic home financing in Malaysia. However, the long-run test estimation found no long-run relationship of deposits, liabilities, GDP, and government expenditure on Islamic home

financing in Malaysia. This means that all variables in the model are not significantly influence Islamic home financing in Malaysia in long term. However, in the short-run, external factors, GDP and government expenditure, show a significant relationship on Islamic home financing in Malaysia. GDP has a negative relationship with Islamic home financing, while government expenditure has a positive relationship on Islamic home financing.

Granger causality test shows that there are seven pairwise relationships exist in the model. The finding emphasized the relationship of macroeconomic and microeconomic factors on Islamic home financing in Malaysia. The result highlights the importance of macroeconomic factors on Islamic home financing in Malaysia. Economic conditions and external factors play an important part on Islamic banks and their services, such as Islamic home financing. Therefore, the government's role in encouraging the growth of government expenditure and controlling GDP in Malaysia may boost the supply of Islamic home financing in Malaysia. This study would give insight on the practitioner of Islamic banks on how to enhance the growth of Islamic home financing in Malaysia. In addition, the management of Islamic banks would look into the variables that significantly affect Islamic home financing in Malaysia, and the correct management can be conducted to improve the supply of Islamic home financing.

The limitation of this study is the limited data on the variables retrieved. As the data was only retrieved until the second quarter of 2021, the finding may differ when the data is obtained in the full quarter of 2021. Therefore, future research on factors influencing Islamic home financing in Malaysia that covers the full quarters of 2021 and more details approach based on different time series tests are needed to determine the other results of finding that may differ from this study.

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