THE ROLE OF MALAYSIA ECONOMIC GROWTH AND LOCAL ISLAMIC BANK FINANCING IN MODELLING LONG RUN RELATIONSHIP

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ABSTRACT

Islamic bank's financing is a financing activity that refers to the Islamic Law (Shariah) and its sources are the Quran and Sunnah. It emphasizes the profit and loss sharing and prohibits the interest as well as the activities that are related to the risks, uncertainty, and speculation. Islamic finance also prohibits the harmful activities such as investment in businesses dealing with alcohol, drug, and gambling. In addition, Islamic bank's financing always a question that do Islamic bank's financing promote the economic growth in Malaysia. Therefore, the main purpose of this study is examining the co integration and long-run relationship between the Islamic banks' financing and economic growth in Malaysia. The measurement of Malaysia economic growth consists of gross domestic product, gross fixed capital formation, foreign direct investment, international trade and inflation. The samples size consist of ten Malaysia full pledge local Islamic banks and the quarterly data are collected from Bank Negara Malaysia and IMF's International Financial Statistics from period 2011 to 2019. In addition, the dynamic relationship investigated by Johansen cointegration test and vector error correction model. This study concluded that a long run dynamic relationship between the gross domestic product, foreign direct investment, international trade and inflation in explaining the important to Malaysia Islamic banking financing. Nonetheless, this study also establishing the relevance of Islamic banking, served as foundation basis and further contribution to the Islamic finance literature.

Keywords: Islamic Banks Financing, Malaysia Economic Growth and Long-run Relationship

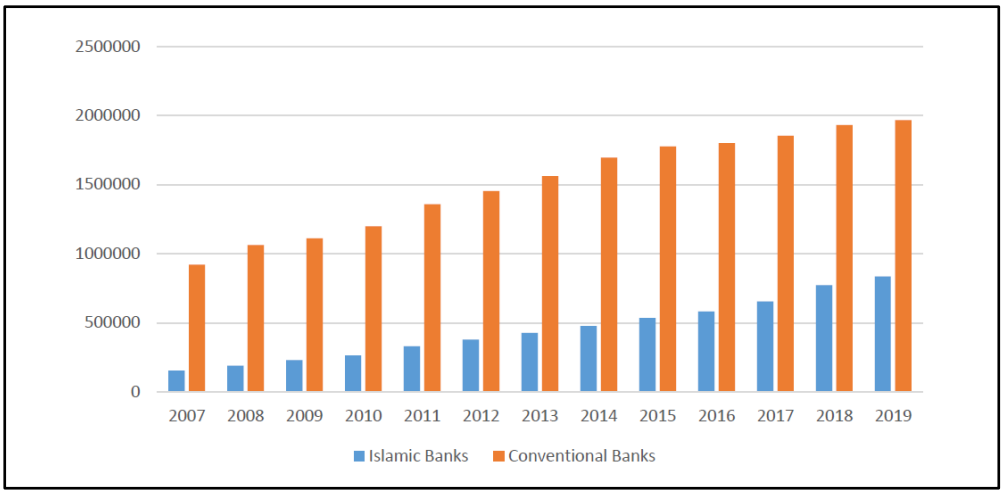
INTRODUCTION

Islamic banking operation accordance to the shariah principles and guided by Islamic Muamalat. The shariah principles defined as an Islamic law that refers to the profit and loss sharing basis as well as the inhibition of receiving and counting of interests. The utilization of money for the reasons for earning money is explicitly illegal hence the wealth must be created from the asset- based investment and real exchange ("Introduction to Islamic finance", n. d.). On the other hand, Islamic Muamalat refer to set of ruling governing commercial transaction and is part of Islamic jurisprudent. The origin of Islam Muamalat in the seventh century was the beginning with Prophet Muhammad worked as an agent for his first wife's business. Islamic banking standards were determined by the exchange and business action in the Muslim world in the Middle Ages. Through the Mediterranean, Spain and other countries were spreading their banking standards. Hence, the basis of the western baking standards as well as principles were apparently based on these principles and standards. In the year of 1963, the Islamic banking in Malaysia started with an investment funds body was made to set aside money for future pilgrims of Haj also known Haj Pilgrims Fund or Tabung Haji. The aim for establishing this institution is to help the Muslims to save to perform Haji. However, the development of Islamic banking was established in 1980 which same as the Islamic banking people are aware today. Islamic Banking Act 1983 was officially set up and guide the Bank Islam Malaysia Bhd (Abdullah, 2019). This act diagrams the guidelines which must adjust to the Islamic banks that desire to work in Malaysia and entrusting the powers of Central Bank in controlling and administrating Islamic banks in Malaysia. A policy that is known as Interest free banking scheme was introduced to the society in 1993. The banking scheme is allowing the banking institutions as well as finance companies to provide the Islamic banking services and products. Hence, Islamic banking are preferred by the Muslim and non-Muslims and encouraging them to invest this sector. Total amount of 20 financial institutions began to provide Islamic banking services in 1993 (Nakagawa, 2009). In the year of 1994, for the purpose of allowing Islamic banking to operate as smooth as completely banking system, Islamic Interbank Money was established.

The Islamic finance represents the financial market and part of banking sector with its enormous financial surpluses as a supplier and demander as consumers of financial and banking services. According to Zin and Kadir (2011), Islamic finance is a financing activity that refer to the Islamic law and its sources are the Quran and the Sunnah. It emphasizes the profit and loss sharing according to the Shariah that prohibits the interest as well as the activities that are related to the risks, uncertainty, and speculation. Nonetheless, the harmful activities such as investment in businesses dealing in alcohol, drug and gambling are also prohibited in Islamic finance. The savings account in Islamic banking industry has been introduced as the Islamic investment packages such as Murabahah, Musharaka, and Mudharabah concept. The components of Islamic banking total financing included hire purchase, leasing, factoring, personal financing, housing financing, trust receipts, etc. Nevertheless, Islamic finance promote economic development by utilizing the concept of profit and loss sharing arrangements which empowers the lending of funds to productive companies or firms that can increase output and create jobs and equitable distribution of wealth (Alawode, 2015). Moreover, Aziz (2013) stated a redistributive instrument, such as mandatory aid giving, endowment and charity work together with the risk-sharing financing tools as an effective tool to reduce poverty and develop a more balanced economic growth

Furthermore, Islamic Finance involves redistributing the wealth and opportunity according to Islamic rules in ensuring economic justice ("Islamic finance: promoting real economic development", 2015). The people in the society are able to achieve justice before production which indicates that they have the same opportunities in the utilization of resources by transferring the collectivity's right of legislative mandate from those who are more able to use the resources. Moreover, Islamic finance is to foster economic growth by encouraging regional and international trade by encouraging investment flows, therefore, intermediating huge cross border monetary flows (Aziz, 2013). According to Aziz (2013), recently, London and Hong Kong international financial centres have been expanding their network with the Middle East and Asian regions, a significant development centres in the worldwide economy. The expanded global dimension of the financial market specifically has encouraged the flows of funds across borders from regions with excess funds to regions with investment opportunities.

Figure 1: Islamic Banks' and Conventional Banks' Total Assets (RM' million)



Source: Monthly Highlights & Statistics - Bank Negara Malaysia.

Over the last three decades, the accelerated growth of Islamic banking antonyms potential to become the alternative to conventional banking system in both Muslim and non-Muslim countries (El-Ghattis, 2011). In Figure 1, the growth rate in total bank's assets of Islamic banks and conventional banks have grown significantly from year 2007 to 2019. The Islamic banks' total assets rise dramatically from 2007 to 2019 by 446 percent while conventional banks' total assets increased by 114 percent. The increment of total assets in Islamic banks has more substantially changes compared to conventional banks, therefore, there are many policy makers, investors, as well as the government being attracted by the robust growth rate and the resiliency of Islamic finance during the financial crisis. In addition, according to Abduh and Omar (2012), bankers has positive outlooks towards the performance of Islamic banking and forecast it will control over 50 percent of savings in the Islamic countries within the next decade. Furthermore, most of empirical review investigate the differentiation of the impacts of conventional banking and Islamic banking on economic performance.

However, as the researchers study the topic about conventional banking and the period used to carry out the study of Islamic banking in Malaysia is too short to make a conclusion for the findings, most of the research were unable to illustrate the overall impact of Islamic Banks Financing on the economy of Malaysia. Moreover, there are only a few empirical studies examining the impacts of Islamic banking activity development in Malaysia. For instance, most of the researchers focus on the studies about the banking products which are followed on the practices of Islamic principles. The research paper done by Ahmad, Palil, Abu Bakar and Dolah (2015) studied the knowledge and principles of Islamic banking towards the Islamic banking products among the Muslim entrepreneurs. Besides that, there are also some researchers examining the monetary and financial system for an interest-free economy which follow the Islamic principles in the past. One of the research projects is carried out by Al-Jarhi (1980) as well. Apart from that, other studies about the awareness or acceptance of Islamic products among the consumers in Malaysia also have been done by many researchers. According to Ahmad Razimi, Romle and Jumahat (2017) and Latip, Yahya and Junaina (2017), the authors aimed to study about the consumers' acceptance towards Islamic banking products and services as well as the factors affecting the customers' acceptance both in the case of Malaysia.

Nevertheless, many conventional banks across the globe underperformed compared to Islamic banks during the financial crisis in 2008. The author demonstrated that due to Islamic banks are highly regulated operational according to the Shariah principles, therefore, they were largely insulated from the crisis. It is because the Shariah principles prohibited riba (interest), gharar (uncertainty) and maysir (gambling) which can greatly impact conventional banks' performance and prompted the crisis (Tabash & Dhankar, 2014a). In this respect, in order to study the contribution to Malaysia's economy, it is more critical to reflect on the Islamic Banks Financing. Therefore, this study is to promote Islamic finance literacy to the public and reduce the gap in literature by determining whether the Islamic Banks Financing and economic growth are cointegrated in the long-run and short-run in Malaysia.

LITERATURE REVIEW

Islamic Banks Financing

According to Zin and Kadir (2011), banks financing activity operated by following the rules of Islamic Law that are different from conventional banks such as all banking activities must not involve any element of interest as it is interest free. According to Shariah principle, it emphasizes the profit and loss sharing and the elements of uncertainty and gambling are not allowable to be involved in banking operations. There are many types of banks financing such as hire purchase (leasing), trust receipt, revolving credit, overdraft and long term loan. According to "Hire-Purchase (Leasing) in Islamic Finance" (n. d.), the hire purchase (leasing) is provided the option to the hirer as the owner of an item at the end of the tenure, with the conditions that have to be fulfil by the hirer in the agreement. The borrower rent the capital goods by requesting from the bank and it is charged from the delivery date taken by the lesser or when the lease is determined. Besides, trust receipt is used to finance purchase or import as a financing product, which is governed by the Murabahah principle. This principle refers to any acquisition cost and markup are disclosed to the buyer. The bank will let the customer as an agent to get the required asset in the Murabahah transactions ("RHB Islamic Bank Berhad Trust Receipt-i", 2015). Moreover, working capital requirements (overhead expenses) are financed by a facility, which is provided by a bank, known as the revolving credit. In addition, the Islamic overdraft is also known as the cash line, which is the account of the customer authorised up to its approval limit with the financing granted under the current account ("Affin Islamic", 2016).

Banks financing plays an important role that contributes to economic growth due to its connected to physical assets and the real economy. Normally, Islamic banks provide financial support to those productive firms that can increase output and create jobs due to the utilization of profit and loss arrangements (Alawode, 2015). Nevertheless, banks financing can promote an equitable distribution of wealth because the redistributive instruments such as mandatory aid giving (zakat), endowment (waqf) and charity (sadaqah) help to reduce poverty and develop a balanced economic growth (Aziz, 2013). Furthermore, redistribution of the wealth encourages economic growth to ensure all members of society could get equal opportunities in the utilization of resources (Zamir, Rostom & Fu, 2012). Furthermore, banks financing leads to economic growth by encouraging regional and international trade and investment flows (Aziz, 2013). This is because the expanded global dimension of the sukuk market facilitates the flows of funds across border from regions with excess funds to regions with investment opportunities. Instances, Malaysia as one of the Asian countries that has utilized the sukuk market to raise funds to finance the infrastructure in many fields such as healthcare, transportation, education and telecommunication that accelerates economic growth (Kwakwa, 2017). According to Kwakwa (2017), Malaysia has launched the "green sukuk" initiative recently in order to achieve sustainable goals and close the gap of both infrastructure and green finance by transferring the sukuk to do some environment-friendly investments.

Gross Domestic Products and Islamic Banks Financing

Gross Domestic Products (GDP) is the key indicator of national income level and benchmarks economy health. According to Farahani and Sadr (2012), found that Islamic banks financing and GDP has significant relationship in the long-run and bidirectional relationship in the case of Iran and Indonesia. Moreover, the authors claimed that Islamic Banks Financing acts as a vital role in improving the economy positively contributed to the real sector of economy in Iran and Indonesia. Hence, the results showed the expansion of Islamic banking may boost the economic upsurge in the long-run. Furthermore, according to Abduh and Chowdhury (2012), the examine the significance relationship between Islamic bank financing and economic growth in Bangladesh, the empirical findings shown GDP have a long-run relationship and bidirectional causality with Islamic bank financing. Moreover, the study suggests the growth of Islamic banking has significant influence on the real sector of economy in Bangladesh and the positive evolution of Islamic banking help to support the economic growth, hence it improves the income level of a country.

In the same vein, according to Tabash and Dhankar (2013b), the researchers determined the linkage between the Islamic bank financing and economic growth in Qatar and supported the view a long-run and bi-directional relationship exists between Islamic bank financing and GDP. The authors claimed that the economy in Qatar facilitates the expansion and improvement of Islamic banking which stimulate the real sector of economy in the long-run. As a result, it helps to reduce poverty in a country, therefore the social equality achieved. Moreover, according to Gudarzi and Dastan (2013), the authors seek to analyze the significance impact of Islamic banks financing on economic growth in Malaysia, Indonesia, Bahrain, UAE, Saudi Arabia, Egypt, Kuwait, Qatar and Yemen. The empirical finding shown Islamic banks financing has significant long-run relationship and bidirectional causality with GDP in the studies countries. Furthermore, the authors argued that the bidirectional causality in the long-run is more significant than the causality in the short term between Islamic banks financing and GDP because of the cause-and-effect is greater in the long-run.

On the other hand, according to Ibrahim (2012), the empirical finding found that there was a contradictory statement which Islamic Banks financing and GDP are cointegrated in the long-run but only unidirectional causality. In other words, Islamic bank financing affects GDP in one-way and authors concluded that the government in Nigeria issued sovereign Sukuk to finance the deficit budget in 2016 has greatly stimulated economic growth. The improvement of economic growth will attract investors from Gulf Countries and other Islamic markets players to contribute capital which enhance the economic performance. In addition, according to Abduh and Omar (2012), the authors analyzed the significance of Islamic banks financing and GDP in Indonesia demonstrated Islamic banks financing and GDP has a long-run relationship and supported the theory of supply-leading between variables. The Islamic bank financing has one-way causality to GDP and the growth of Indonesian economy was contributed by domestic financing by Islamic banking. Therefore, the transmission of funds from surplus to deficit households has facilitated due to Islamic banking acts as an effective financial intermediary.

Gross Fixed Capital Formation and Islamic Banks Financing

The Gross Fixed Capital Formation (GFCF) is defined as the producers' investment in fixed capital assets, minus the depreciation in the domestic economy during a certain accounting period. It includes the cost of the improvements on land, plants, machinery as well as the purchases of equipment. It is one of the proxies of economic growth used to determine the relationship between Islamic bank financing and economic growth (Tabash & Dhankar, 2014a). According to Tabash and Dhankar (2014a), study the relationship between Islamic bank financing and GFCF in the United Arab Emirates shows cointegrated unidirectional causality in the long-run. It indicates that Islamic bank financing will granger cause GFCF in a unique direction but not in the opposite direction. Furthermore, the empirical findings also supported by Tabash and Dhankar (2014b), found that Islamic bank financing and GFCF have unidirectional causality and long-term cointegrating relationship in Qatar and the movement of both the variables will be the same in the long-run. Moreover, a study by Abduh and Omar (2012) examine the relationship between Islamic banks financing and GFCF in the case of Indonesia show a significant relationship in the long-run. However, the result of the granger causality test proved that there is no causality relationship between Islamic banks financing and GFCF.

On the other hand, there are also several empirical findings are contradicted between Islamci banks financing and GFCF. According to Echchabi and Azouzi (2015), the researchers conducted a research in the United Arab Emirates discovered that Islamic banks financing and GFCF are not cointegrated in the short-run and long-run. Moreover, the granger causality test also proves that no granger causality relationship between the variables and hence, there is no causality relationship among them. In support to that, Wahab, Mufti, Murad and Arif-ul-Haq (2016) carried out a study in Pakistan and Malaysia showing that Islamic banks financing and GFCF do not have cointegration and significant association among the study variables. Therefore, the Islamic banks financing and GFCF do not have a causal link and will not affect each other in the economy. On the other hand, the study proved that in the case of Malaysia, the Islamic banks financing and GFCF have stable relationships and significantly in the long-run and short-run respectively.

Foreign Direct Investment and Islamic Banks Financing

The significance between Foreign Direct Investment (FDI) is used to measured foreign investment in a country and it contributed to economic growth. According to Tabash and Dhankar (2014a), study the connection between Islamic bank financing and FDI in the United Arab Emirates founds a cointegration relationship and also proved that Islamic banks financing contributes to the growth of foreign investment in the long-run. Moreover, the findings suggested that the Islamic banks financing and FDI are existing with bidirectional causality relationship, proved that Islamic banks financing moves together with the economic growth in the long-run. In addition, the authors claimed that the findings proved that FDI strengthens Banks financing and Islamic finance is an appropriate and charming surrounding the attraction foreign investments. Moreover, according to Tabash and Anagreh (2017), examine the cointegration relationship between Islamic banks financing and FDI, it shown a long-run relationship and granger causality relationship in UAE. On top of that, the research stated that Islamic banks financing and FDI have stable cointegration relationships in the long-run and granger causality test shown an exist bi-directional causality. The justification the United Arab Emirates is having a sound banking system hence provides a good environment for FDI and the sector of Islamic finance would promote economic growth.

On the other hand, Tabash and Dhankar (2014b) examined the cointegration and granger causality connections economic performance with various factors in Qatar, the empirical findings shown a Islamic banks financing and FDI consists of the stable and long-run cointegration relationship. In long-run, Islamic banks financing will move together with economic development by the investment of foreign investors. However, the authors found contradicting results in the granger causality test which showed that FDI and Islamic banks financing contain unidirectional granger causality affects FDI. The study claimed that Islamic bank financing creates an ideal environment for FDI. In addition, according to Tabash and Dhankar (2015), the researchers determine the relationship of Islamic bank financing with economic growth in the Kingdom of Saudi Arabia. The Johansen cointegration test showed that the cointegration relationship exists between FDI and Islamic banks financing and continuing association among the variables. This indicates that Islamic bank financing and economic development work together in long-run. Furthermore, the findings showed that there is unidirectional causality relationship from Islamic banks financing to FDI, an appropriate and attractive environment for absorbing FDI and enhances economic growth. This study also claimed that if the Islamic financial institution promotes economic growth and important for the long term association of economics since it brings welfare to the economy and reduces the poverty of the society. Furthermore, Lawal and Iman (2016) studied the relationship of Islamic banks financing and economy performance Nigeria, the empirical findings showed that FDI are cointegrated in long-run towards the Islamic banks financing. Besides, the authors found consistent results that Islamic banks financing and FDI exist a long-run and do not have a granger causality relationship.

International Trade and Islamic Banks Financing

International trade is important to drive economic indicator in driving the health of a country. According to Nursyamsiah (2017), the author examined the relationship between Islamic banks financing and macroeconomic variables in Indonesia. The empirical findings shown Islamic banks financing and international trade have a long-run relationship. Moreover, the authors utilized the granger causality test, found a unidirectional relationship exists from international trade to Islamic banks financing and contribute productive activity to the real economy. On the other hand, there are also several research showing the results which are contradicted with the results above. According to Tajgardoon, Behname and Noormohamadi (2013), study short-run and long-run effect on Islamic banking and economic growth in Asia such as Bahrain, Iran, Malaysia, UAE, Iraq, Pakistan, Kuwait, Oman, Saudi Arabia, Qatar, Turkey and Yemen. The findings revealed that Islamic banks financing and international trade have no long-run relationship and unidirectional causality effect. Moreover, Wahab, Mufti, Murad and Arif-ul-Haq (2016) studied the

cointegration and causality between Islamic banks financing and also development of Pakistan and Malaysia economy. In the case of Pakistan, the empirical results showed that there is no significant association and co-integration between Islamic banks financing and international trade. The reasons are less participation in Shariah based modes of financing and investment. Shariah based and Shariah compliance are the two main modes of financing and investment in the banks financing. Shariah based modes of financing can contribute more to real economic development as compared to Sharia compliance. However, it is difficult for Islamic banking institutions to involved because it required to demonstrate the viability of the project before investing. Therefore, most of Islamic banking institutions prefer in Shariah compliance modes of financing. In the case of Malaysia, both short-run and long-run relationships are significant in Islamic banks financing and international trade and unidirectional in the granger causality test.

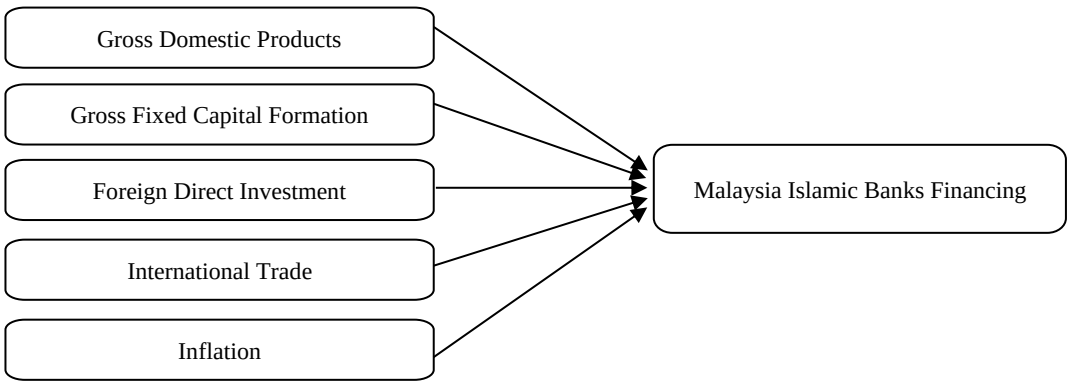
Furthermore, Echchabi and Azouzi (2015) studied the significant connection between Islamic banking development and economic growth in the United Arab Emirates. The empirical findings shown Islamic banks financing and international trade do not have relationships in short-run and long-run. However, the granger causality test indicates that Islamic banks financing does not cause-and-effect international trade. On the other hand, Miniaoui and Gohou (2011), found a contraction finding between Islamic banks financing and international trade because a larger number of financial institutions and the percentage of Islamic financial institutions in the global banking sector of UAE is relatively small, which is 20 percent (Rivzi, 2012). In the same vein, Muhammad and Dauda (2018) investigated the linkage between Islamic finance development and economic growth in Nigeria, showed that Islamic banks financing does not affect international trade and similar results with Echchabi and Azouzi (2015) on the granger cause effect.

Inflation and Banks Financing

Inflation defined as the increasing rate of the general price level of goods and services in a country. According to Nursyamsiah (2017), the fluctuation of inflation is significantly influencing long-run effect on Islamic banks financing in Indonesia. On top of that, the author's found inflation has the bidirectional causality with Islamic banks financing. Moreover, the authors test on impulse function to strengthen the findings, inflation is responded negatively by the Islamic banks financing and is affected by the diversity using the variance decomposition. Furthermore, Setyowati (2019) also showed a similar result as in the study of Nursyamsiah (2017), Islamic banks financing and inflation are cointegrated in long-run relationship in Indonesia. The inflation has short term shock in the formation of a stable relationship towards the Islamic banks financing and the significant negative long-run effect. It also showed that Islamic banks financing and inflation have bidirectional causality relationships. In justification, the author mentioned that almost 70 percent of Islamic banks financing structured with Murabahah concept financing on purchasing assets. In which the changes in inflation affect the consumer demand on goods and services with Islamic banks. Moreover, Islamic banks financing has a negative response toward the inflation, the high inflation forces the Islamic banks lowering its financing cost as it caused lesser consumer to have the ability to purchase items (Setyowati, 2019).

In addition, Zahid and Basit (2018) found that inflation is significantly reacted toward Islamic banks financing in Pakistan on the cointegrating test. It indicated that the declining growth of Islamic banks financing is caused by a higher inflation rate. This situation happens as the increasing price level of commodities causes a lower purchasing power among the consumers. Hence, the consumers tend to reduce the investment, savings and business activities that are promoted by Islamic banks based on the profit and loss basis. Moreover, when the salaries are not adjusted for inflation, it causes the distribution of income to become unequal, especially between lenders and borrowers. This study also found a negative and statistically significant by inflation to achieve the long-run equilibrium. Furthermore, Bm and Uddin (2016) concluded that inflation and Islamic banks financing are significantly related to each other in the long-run relationship as empirical finding with cointegrating test. In support to the result, authors test on autoregressive distributed lag bound test, inflation has a unidirectional relationship with Islamic banks financing. However, there is contradicting by Sumarti, Hayati, Cahyani and Wahyudi (2017) an insignificant relationship between Islamic banks financing and inflation in Indonesia. This indicated that Islamic banks financing and inflation has no significant relationships in the long-run. Moreover, inflation has a unidirectional causality with Islamic bank financing.

Figure 1: Conceptual Framework



RESEARCH METHODOLOGY

Research Design

This study employed secondary data to capture the dependent and independent information and it is collected from various types of resources such as Bloomberg terminal, bank annual report, Bank Negara Malaysia and IMF's International Financial Statistics. According to Rouse (2017), secondary data is the data that has been collected from studies, surveys and experiments and accessed by the researchers. The secondary data is used to increase the sample size of research and it is more efficient and faster to do the research since it is an existing resource. Moreover, the quantitative data is used to measure the time series data being collected in terms of numbers and statistics. The quarterly data from first quarter 2011 until fourth quarter 2019 are collected on quarterly basis for ten Malaysia local Islamic banks to derive a 360-observation data. A quantitative data is an approach of quantifying problem by using numerical data and several statistics, which provides a more suitable data for data analysis (Wyse, 2011). In the Table 1 it shows the data quantification and measurement for this study.

Table 1: Data Collection for independent and dependent variables

Variables	Measurement	Unit of Measurement	Sources of data
Islamic Banks Financing	Overdraft + Hire purchase + Leasing + Block discounting + Bridging financing + Syndicated financing + Factoring + Personal financing + Housing financing + Term financing + Bill Financing + Trust receipts + Revolving credit + Foreign currency financing	Volume, Ringgit	Respective bank annual report
Gross Domestic Product	Consumption + Investment + Government Purchases + Net Exports	Volume, Ringgit	IMF's International Finance Statistics
Gross Fixed Capital Formation	Malaysia investment – Malaysia disposal in fixed assets	Volume, Ringgit	IMF's International Finance Statistics
Foreign Direct Investment	Malaysia inflows of FDI – Malaysia outflows of FDI	Volume, Ringgit	Monthly Statistical Bulletin, Bank Negara Malaysia
International Trade	Malaysia exports + Malaysia imports	Volume, Ringgit	Monthly Statistical Bulletin, Bank Negara Malaysia
Inflation	Cost of market basket in a given year / Cost of market basket at base X 100	Percentages changes	IMF's International Financial Statistics

Data Analysis - Unit Root Test

The unit root test is used to determine the order of each of the variable's integration. The series of data are collected to check the stationarity to prevent the result to be invalid. The mean, variance, and covariance of series are constant across different periods which indicate that the variables are in stationary trend (Gujarati & Porter, 2009). Hence, the stationary variables will provide more accurate results as compared to non-stationary variables. Most economists will argue that a macroeconomic time series contains unit root and its fluctuation over time might suggest a non-stationary trend. It is equally important to have a stationary time series to avoid biased results which is called spurious regression (Ling, Nor, Saud & Ahmad, 2013). Hence, the Augmented Dickey-Fuller (ADF) test is used to analyze the stationarity of the variables. Besides, Phillips-Perron (PP) test will also be applied to strengthen the accuracy of result.

Data Analysis - Johansen Cointegration Test

According to Yoon, Min & Jei (2019), Johansen had developed the Johansen cointegration test in 1988. Number of cointegrated variables in the model is identified by using this test. This test can be called as likelihood-ratio tests. Maximum eigenvalue test and trace test are under the Johansen cointegration test. The importance of the test is to examine the cointegration relationship between the variables in the model (Gomez-Biscarri and Hualde, 2015). According to Dwyer (2015), the test statistics for both maximum eigenvalue test in equation 1 and trace test in equation 2 can be expressed as:

$$\lambda_{trance}(r) = -T \sum_{i=r+1}^{g} \text{In}\,(1-\lambda_i) \quad (1)$$

$$\lambda_{trance}(r) = -T \sum_{i=r+1}^{g} \text{In}\,(1-\lambda_i) \quad (2)$$

Where;

r = number of cointegration vectors under the null hypothesis
T = number of sample size
λ = eigenvalue

According to Zou (2018), trace error correction model was developed by Engle and Granger by combining cointegration and error correction models. It suggested that when there is a cointegration relationship between variables, VECM can be further derived to determine whether there is a short run and long-run relationship. On the other hand, the modification of VECM is needed to allow variables stationary among the series if the time series are not stationary. The VECM is used when the variables are stationary in their differences. Besides, according to Nursyamsiah (2017), usually time series data tends to have stationarity at the first difference level. Moreover, VECM can indicate the changes for short-term behavior of a variable over the long-term behavior due to the permanent change. The VECM model specifications can be expressed in the equation 3.

$$\Delta yt = \alpha\beta' y_{t-1} + \sum_{i=1}^{p-1} \Gamma_i \Delta y_{t-i} + \varepsilon_t \quad (3)$$

DATA ANALYSIS

Unit Root Test

In Table 2, the ADF test applied to investigate either the collected secondary data are affected by nature or economic trend presented in the time series model, the empirical test of significant p-values of the dependent and independent variables in this study shown are it significant level of 1% at first difference level. This indicates that the null hypothesis of ADF test should be rejected. Therefore, there is sufficient evidence to conclude that there the collected secondary data for the independent and dependent variables are stationary in the first difference level and the most important the fulfillment of the rule of thumb of Johansen Cointegration Test. The cointegration test required the secondary data to be stationary at first different to precisely to answer the research objective of this study and generate the desired explanation on the long-term effect in the Islamic Banks Financing.

Table 2: The Unit Root Test of Augmented Dickey Fuller

	LEVEL		FIRST DIFFERENCE	
Variables	**Intercept**	**Trend & intercept**	**Intercept**	**Trend & intercept**
Islamic Banks Financing	1.0000	0.9233	0.0000***	0.0000***
Gross Domestic Product	1.0818	0.9343	0.0001***	0.0000***
Gross Fixed Capital Formation	0.6027	0.5723	0.0000***	0.0000***
Foreign Direct Investment	0.7921	0.2001	0.0000***	0.0000***
International Trade	0.9592	0.6277	0.0000***	0.0000***
Inflation	0.8762	0.2283	0.0000***	0.0002***

Note: *, **, *** indicates the rejection of the null hypothesis at 10%, 5%, 1% significance levels. Lag lengths for the Augmented Dickey–Fuller unit root are based on schwarz information criterion.

The Johansen Co-integration Test

In Table 3, it shows that the empirical test of Johansen Co-integration to identify the co integration between independent and dependent variable. In Islamic banks financing and gross domestic product, the trace statistics of 6.984728 and max-eigenvalue statistics of 6.984728 are larger than the critical value at 90% and 95% confidence level respectively. Therefore, it concluded that, Malaysia Islamic banks financing and gross domestic product have a cointegration long run relationship and implies the Islamic banks acted as a financial intermediation role effectively by transmits the funds from surplus to deficit households and promotes economic growth in long run. Nonetheless, the Islamic finance industry emphasizes on the profit and loss sharing principle under Shariah law, therefore the funds are encouraged to invest in asset-based (debt-like investments) and asset- backed (equity-like investments) transactions through equitable adjustment which is able to reduce poverty and sharing wealth in the country, hence facilitating economic growth.

On the other hand, the Islamic banks financing and gross fixed capital formation of the trace statistics 2.705545 and max-eigenvalue statistics of 1.533586 are smaller than the critical value at 90% confidence level, therefore, there is no co integrating long run vector exists. The Malaysia Islamic banks financing is structured in the Shariah- compliant modes of financing to adherence to Shariah requirements specified by the Malaysia Securities Commission instead of Shariah-based modes of financing that consequential from Shariah laws. In the Shariah based modes of financing may help to promote the investment as well as the real sector of economy in the country rather that focus on the capital requirement as in Shariah-based modes.

Table 3: Johansen Cointegration test results

Hypothesized no. of CE(s)	Trace Statistic	Critical Value	Max-Eigen Statistic	Critical Value
Islamic Banks Financing and Gross Domestic Product				
r = 0	49.06154***	13.42878	42.07682***	12.29652
r ≤ 1	6.984728*	2.705545	6.984728**	2.705545
Islamic Banks Financing and Gross Fixed Capital Formation				
r = 0	10.35519	13.42878	8.821607	12.29652
r ≤ 1	1.533586	2.705545	1.533586	2.705545
Islamic Banks Financing and Foreign Direct Investment				
r = 0	27.02264**	13.42878	22.18740**	12.29652
r ≤ 1	4.835239**	2.705545	4.835239*	2.705545
Islamic Banks Financing and International Trade				
r = 0	15.43331***	13.42878	9.887529	12.29652
r ≤ 1	5.545783*	2.705545	5.545783**	2.705545
Islamic Banks Financing and Inflation				
r = 0	12.09458	13.42878	9.243524	12.29652
r ≤ 1	2.851056*	2.705545	2.851056*	2.705545

Note: *, **, *** indicates the rejection of the null hypothesis at 10%, 5%, 1% significance levels. Lag lengths of eight for the Johansen Cointegration are based on schwarz information criterion.

Furthermore, the empirical analysis in Table 3 also concluded a co integrating and long run relationship between Islamic banks financing and foreign direct investment. The trace statistics of 4.835239 and max-eigenvalue statistics of 4.835239 are larger than the critical value at 95% and 90% confidence level respectively. Malaysia as Islamic finance hub acts as an attractive environment for absorbing foreign direct investment into Malaysia. In line with that, Malaysia as a worldwide leader in the sector of Islamic finance, provides confidence and attracts investors from other countries to make investments into Malaysia. Therefore, with long run effect on foreign direct would leads to more financing option offered by the Malaysia Islamic bank.

Islamic banks in Malaysia had progressively applied technological methods to make the trade finance operations more efficient in order to facilitate and support the halal exports (Singh, 2017). Therefore, the empirical analysis shown co integration and long run relationship between Islamic banks financing and international trade with a trace statistic of 5.545783 and max-eigenvalue statistics of 5.545783 are larger than the critical value at 90% and 95% confidence level respectively. Bank Negara Malaysia has prepared many initiatives to encourage Islamic banks in facilitating the trade finance, including the digitalization of trade finance offerings and upgrading the accessibility of trade credit takaful to protect the businesses against the risk of non-payment by buyers. All these measures were taken to support the halal exports, which promote an economic growth and facilitate the flows international trade.

Malaysia practices an open economy, which involved international trade and investment activities with foreign countries and the inflation served as one of the important factors influencing the Islamic bank financing. In Table 3, the empirical analysis shown trace statistics of 2.851056 and max-eigenvalue statistics of 2.851056 are larger than the critical value at 90% confidence level respectively. In the principle of daman (guarantee) under the Islamic law, there is a compensation for their risk assumptions provided by Islamic banks with a purpose to avoid the depositors to lose their right as well as to protect their assets value. This is due to the depositors may lose the value of their saving amount in the bank during inflation. The compensation can only be provided if the borrower is guaranteed to be paid a sum to maintain their purchasing power. Therefore, the compensation may increase the overall savings of the depositors and resulting in greater economic growth.

CONCLUSION

Nutshell, the major findings of the economic variables based on the empirical analysis results proven that the gross domestic product, foreign direct investment, international trade and inflation have a co integration of long run relationship in explaining the Malaysia Islamic Bank Financing. The importance of this study is to formulate a strategy by Bank Negara Malaysia as Malaysia centre bank in shaping the role in generating economic growth for the country. The Islamic Bank in Malaysia functions as a parallel market to the conventional banking and plays a complementary role to the banking system in broadening and deepening the Islamic financial markets in Malaysia. Therefore, an implement new or modify existing policies that encourage the government and consumers to focus on Islamic banking industry for the efficient of the banking system. The gross domestic product and international trade are indicators of economic growth and it shown long run important factors in sustaining the Islamic bank financing option, a proper execution plan need put in place to anticipant the growth as well as a centre of Islamic hub. The model in this study lays a theoretical framework for establishing the relevance of Islamic banking, served as foundation basis and further contribution to the Islamic finance literature.

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