EVALUATING THE EFFECT OF ISLAMIC FINANCING TO FINANCIAL DEVELOPMENT: EVIDENCE FROM OIC COUNTRIES

HAFNIDA HASAN
Accounting and Finance Department
Applied Science University, Kingdom of Bahrain

SELAMAH MAAMOR
Islamic Business School
Universiti Utara Malaysia

HUSSIN ABDULLAH
School of Economics, Finance and Banking
Universiti Utara Malaysia

*Corresponding Author: selamahm@uum.edu.my

Abstract

The development of Islamic finance is governed by Islamic laws (Shariah). The main principles that regulate all forms of transactions in Islamic banking activities include the prohibition of interest or usury (riba), the use of excessive risk (gharar), and gambling (maysir). The Islamic finance industry has become a prominent sector and is one of the fastest growing components of financial developments over the last decade in the global financial system. The availability of large numbers of Islamic finance products will increase significantly as there have been a growing demand throughout the world, especially in OIC participating countries. Hence, the objective of this study is to identify the important factors that enhances financial development in the selected OIC countries (Malaysia, Indonesia, Jordan, Kuwait, Saudi Arabia, Sudan and Yemen). Three indicators of financial development
were used; Islamic finance, broad money and liquid liabilities. The data used in this study is the panel data from the year 1990 to 2012 which were obtained from the International Monetary Fund, Islamic Banks and Financial Institutions Information (IBIS), and World Bank databases. This study employed pooled OLS, fixed and random effect model. The results indicate that there are significant relationships between Islamic finance and financial development. Specifically, this study found that liquid liabilities and Islamic finance are two factors that have significantly influenced financial development in the OIC countries. Furthermore, the findings suggest that the OIC governments are required to develop policies that would integrate Islamic finance into their financial system. These policies should be centred around regulatory framework and supervisory role to utilize Islamic finance for greater economic growth.

**Keywords**: Islamic finance, Financial development, OIC countries, Pooled OLS, fixed effect, random effect.

**Received**: 19/07/2018  **Revised**: 25/07/2018  **Accepted**: 23/05/2019  **Published**: 15/12/2019

**Introduction**

The Islamic finance industry has become a prominent sector and is one of the fastest growing components of financial developments over the last decade in the global financial system. Based on the study by Haron and Ahmad (2000), since the establishment of the first Malaysian Islamic bank in 1963, the number of Islamic banks have increased significantly and have shown tremendous growth over the years. The Malaysian International Islamic Financial Centre (MIFC) 2015 reported that “the current value of the Islamic finance assets, (led by the Islamic banking sector and the global sukuk market) is estimated to be more than $2 trillion (representing a compounded average growth rate of 17.3%). It is expected that the Islamic finance industry will expand further, with total assets projected to increase to nearly $3.5 trillion by 2018.”

The development of Islamic finance is governed by Islamic law (Shariah). The main principles that regulate all forms of transactions in Islamic banking activities include the prohibition of interest or usury (riba), the use of excessive risk (gharar), and gambling (maysir). Contrary to conventional finance, Islamic finance operates on a profit and loss sharing (PLS) mode established within the frameworks of
Shariah law that are based on the Quran, Sunnah and other secondary sources on Islamic laws. There are many references from the Quran that explains the concept of riba, for example in Surah Al-Baqarah, 275-279. The prohibition of riba or interest has been articulated and emphasized by Allah SWT in the Surah Al-Imran, 130.

Islamic banking differs greatly from conventional banking, particularly with regards to assets and liabilities. In conventional banking, almost all financing and deposit of side products are loan based; while the assets and liabilities in Islamic banking are free from interest. Qureshi (2003) explained that banking can be built as an alternative structure using prohibition of riba and partnerships concept. As stated by Khaldi and Hamdouni (2011), the basis of mudarabah/musharakah contract is based on the provision of funds on the side of the liability. For example, deposits that are made according to the mudarabah/musharakah concept on the side of the liability of a bank’s balance sheet has been the primary mechanism through which money is received from depositors. Furthermore, this makes each depositor to be an accomplice in the bank’s business.

Moreover, Islamic banks have provided various financing contracts on the asset side of the balance sheet. These contracts are on a partnership basis if the profit - loss sharing (mudarabah and musharakah) mode are used. Another method that may be employed is the fixed-income modes of financing like cost-plus sale (murabaha), leasing (ijarah) and a commission to manufacture (istikna). In addition, Tabash and Dhankar (2014) asserted that the utilization of Islamic finance can promote financial transactions which are directly linked to real economic transactions without the element of interest.

Khaldi and Hamdouni (2011) stated that the demand for Islamic finance and banking is higher in the Middle East and Southeast Asia, however, has been increasing rapidly in the United States and Europe over the years. It is suggested that many countries, especially the Organization of Islamic Cooperation (OIC) participating countries such as Malaysia, Indonesia and Saudi Arabia are pioneer countries that have spearheaded and implemented Islamic finance and banking.

Financial development is not only influenced by Islamic finance, but has also been affected by other factors that were examined in previous studies, such as liquid liabilities (King & Levine, 1993; Demetriadies & Law, 2006; Ahlin & Pang, 2008) and broad money (Gillman & Haris, 2004; Odeniran & Udeaja, 2010). Therefore, the objective of this study is
to identify the important factors that enhances financial development in the selected OIC countries (Malaysia, Indonesia, Jordan, Kuwait, Saudi Arabia, Sudan and Yemen). The remaining sections will review previous studies, followed by methodology, findings and conclusion.

**Review on Development of Islamic Finance**

Recent developments on Islamic finance have been vigorous. Lee and Detta (2007) stated that “from the perspective of an Islamic bank, the elements of a market for Islamic finance products have five tenets: the seller (Islamic banks and other banks participating in Islamic banking), the buyers (the customers of the banks), the relevant products or assets, the exchanges made according to the various Islamic civil contracts and the selling price. The five tenets above are important information that should be explicitly mentioned in the contract between the customer and the Islamic bank in order to comply with Islamic principles.”

In addition, Akacem and Gilliam (2002) have stated that the most important guideline for Islamic banking is the presence of equity that is based on the profit and loss sharing (PLS) mode, as compared to interest rate operations. Choudhury and Hussain (2005) have also indicated that the prohibition of interest and profit sharing mode are two basic principles in Islamic financing. According to Chapra (2000) and Iqbal (1997), PLS finance was able to promote macroeconomic stability. Khoutem and Nedra (2012) stated that PLS development has been the best driver for economic development by advancing gainful ventures through the effective utilization of fund and enhancing the productivity of resource allowance. Moreover, excluding effective financial capital market, the enhancement of financial development is able to solve issues on asymmetric information. On the other hand, Khan and Bhatti (2008) found that despite making so much progress, Islamic banking has been facing problems such as the need to improve their liquidity, corporate governance and risk management techniques.

Furthermore, the lack of PLS and the abundance of debt based short-term instruments have become a growing problem, for which Bacha (1995) have indicated that with the use of debt-like instruments, Islamic banks will continue to stay on the periphery of the financial sector and such a case would be incompatible with the social needs of the countries. Haque and Mirakhor (1986) suggested that the
uncertainty and information asymmetry will affect PLS contracts. Their proposed model concludes a classic agent vital relationship, in which the operator is the entrepreneurial firm and the principal is the consumer-investor. Hence, in such situations, the impact of asymmetric information and the uncertainties on PLS is over-investment.

Apart from that, Basher (1999) observed that Islamic banks do not disclose the returns on Islamic financial products on a PLS premise due to the nonappearance of investor protection and successful regulations in the Islamic banking sector. Furthermore, the inefficient tax system, high rate of absence in education, low accounting standards and the practice of keeping a double set of accounts in the majority of businesses have caused a major impediment to the practical usage of the PLS system in most Muslim countries (Ghafoor, 1999; Khan, 2003; Khan & Bhatti, 2006).

Furthermore, Matthews et al., (2002) stated that, with regards to minimizing risk, Islamic banks could establish enhanced arrangement of investment participation in order to diminish the global risk identified in the balance sheet report. On the other hand, the model proposed by Baldwin et al., (2002) is aimed at discovering the conduct of an Islamic firm, in the presence of moral hazard and adverse selection.

In addition, Ascarya (2010) have identified several reasons for the lack of PLS in Indonesia. These reasons are a result of internal and external factors. Technical and managerial factors are major internal problems, while the lack of will from the authorities and the lack of trust from the society are basic external problems. This is further supported by Addawwe (2012), which indicates that the banks forces onto customers a minimum profit expectation which implies moral hazard, as explained by a Shariah review director. Khoutem and Nedra (2012) noted that PLS development would be more productive if an Islamic bank chooses low risk projects and avoids highly leveraged investments.

Apart from the basic prohibition of riba and the application of the PLS system, there are many other factors that may affect Islamic finance. According to previous studies, there are four main characteristics that defines Islamic finance, while other studies have identified more (for example Mirakhor, 2000; Siddiqi, 2001; Haron & Hisham, 2003; Qureshi, 2003; Derbel et al., 2011; Khaledi & Hamdouni, 2011). Based
on these studies, there are nine characteristics of Islamic finance and banking (see Table 1).

Table 1

*Nine Characteristics of Islamic Finance and Banking*

| Main Characteristics                              | Meaning                                                                                                                                 |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| The prohibition of interest (Usury)              | All forms of contracts and transactions must be free from *riba*.                                                                     |
| The prohibition of unethical investments         | Islamic banking is also characterized by ethical norms and social commitment. According to Wilson (1979), ethical investment funds exclude tobacco, liquor, gambling, weapons and armaments among others. |
| The freedom from al-Darar                         | Contracts should not be harmful to any party.                                                                                         |
| The freedom from al-Gharar                       | Islamic finance should avoid conflicts with major speculative behaviour and must be free from uncertainties.                         |
| The freedom from impulse                         | Investors are prohibited from making any faults that are unsafe to their interests.                                                   |
| The desirability of profit sharing               | Profits and losses must be shared between the borrower and lender, rather than being solely distributed to one side.                   |
| The emphasis on equitable contracts              | Investors have the privilege not to be constrained into a transaction or to be kept from making a transaction.                      |
| The linking of finance to productivity           | Islamic financial transactions are systematically linked to real assets, such as *muḍārabah* and *mushārakah*. “Consequently, the Islamic banking system leads economic growth by promoting productive projects and supporting the trade of commodities and services.” |
| Zakah and Al Qard Al-Hassan                      | *Zakah* is defined as an obligatory periodic levy on all Muslims who have a certain minimum amount of wealth, and is directed to specific categories of poor and needy people. Meanwhile, Al Qard Al-Hassan is simply defined as an interest-free loan. |
Based on Table 1, the prohibition of *riba* and the desirability of profit sharing are some of the main characteristics of Islamic banking. In addition to these characteristics, Islamic banking presents several advantages which are described in the next subtopic.

Since Islamic banking has emerged as a promising industry in the financial system, many countries have begun offering Islamic banking, including OIC countries. Based on previous studies, there are four main advantages of Islamic banking.

Friedman (1969) demonstrated that the condition for the optimal allowance of resources is when the interest rate is equals to zero. Similarly, Wilson (1979) and Cole and Kocherlakota (1998) have empirically concluded that in general equilibrium models, a zero interest rate is vital and adequate for proficient distribution of resources. Moreover, previous studies (e.g. Alshammari, 2003; Al-Jarrah & Molyneux, 2005) have found that by having zero interest rates on expense and profit function, Islamic banks will become more efficient than conventional banks. This notion was further supported by Goaied and Sassi (2010) and suggested that if Islamic banks exclude all speculative activities that relates to the principles of interest, the adjustment in cash flow will take place through the changes in supply and demand. Srairi (2010) found that Islamic banks in GCC countries are relatively efficient at generating profit than at controlling costs during the period between 1999-2007, based on data from 71 commercial banks’ performance. However Abdul-Majid et al., (2005) and Mokhtar et al., (2008) concluded that the efficiency of Islamic banks is either similar or lower than conventional banks. Abdul-Majid, Saal and Battisti (2010) investigated the efficiency of Islamic and conventional banks in 10 countries that operated from the year 1996 to 2002 by using an output distance function approach. The result shows that the efficiency of Islamic banks is lower than conventional banks. Additionally, the findings from Baele, Farooq and Ongenan (2010) identified that conventional bank are more efficient on loan as compared to Islamic banks in Pakistan, based on the study period from the year 2006 to 2008.

Cihak and Hesse (2010) carried out the z score analysis and found that the Islamic financial system is financially stronger and less hazardous than the conventional banking system. The authors stated that holders of investment accounts in the Islamic banking system do not have to settle low-value securities. The study conducted by Samad and Hassan (2002), which focused on Malaysian data over the
period of 1984 to 1997, suggested that Islamic banks are less risky and more solvent than conventional banks. Kia and Darrat (2003) found that in the demand equations for cash and profit sharing deposit, the demand driven profit sharing deposits are more stable and has strategy invariant capacity. They proposed that the banking framework based on profit sharing could help sustain the financial framework from changes in interest rates, thus, minimizing the risks of financial uncertainties. The study concluded that profit sharing deposits could represent a tenable instrument for financial approach in Iran. This is further supported by other studies (Kaleem, 2000; Kia, 2001; Darrat, 2002; Samad, 2004) which suggested that without interest rates, Islamic financial intermediaries are more sustainable than conventional banking.

Islamic banks poses a greater advantage over conventional banks as Islamic banks are able to benefit from the characteristics of freedom of gharar (uncertainty) and al-darar (harmful in contracts) which have reduced the moral hazards and adverse selection problems. Moreover, Goaied and Sassi (2010) have suggested that the study of shariah coupled with a high level of cultural aptitude would reinforces the validity of Islamic banking and produce a competitive advantage over conventional banking.

As the most important criteria for financing projects in the conventional banking system are the ability to repay loans, collateral and guarantees, it was identifies that only the wealthy will have access to the financial market. In contrast, Islamic finance provides funds on the basis of profit sharing and loss principles which emphasizes the importance of profitability and rate of return (El-Galfy & Khiyar, 2012). Therefore, those who are not wealthy but have acquired essential skills to ensure success in projects would have a better chance in acquiring the necessary finances. Dusuki (2008) found that Islamic financial institutions must not only concentrate on increasing profits but should play a vital role in addressing socio-economic problems such as poverty, and help improve important aspects of human welfare (e.g. education illiteracy, reducing child mortality, etc) by efficiently directing financial assets towards productive opportunities. Subsequently, this will boost production, investment and trade activities.

In neoclassical growth theories, the emphasis has been on expanding savings and innovation progress. Most of these theories were aimed at identifying the increment in capital for every worker and
eventually output per worker, and to determine the factors that empower an economy to achieve the steady state level of output. In the endogenous growth theory models, advanced works had been carried out by endogenizing the innovation, human capital and savings. As stated by Shaikh (2012), the rate of wage zakat promotes the productive sector, whereby zakat serves as an incentive to ensure accomplishment of potential output with tolerable financial and no shortage of capital through the prohibition of interest in the Islamic banking sector.

Furthermore, in the classical and neo-classical literature on growth and development, the theories and policies did not produce a fair conclusion on income distribution. In contrast, Islamic economics have non-state systems that ensure wage redistribution without interfering with individual opportunity and other component in the business sector. Shaikh (2012) asserted that the prohibition of interest-based earnings, exploitative types of trade and burden of excessive charges from the state beyond zakat by Islam would subsequently ensure more extensive opportunities to individuals.

The application of the riba system has created many discrepancies, and have either failed or has been inconsistent, particularly when applied in an economy that is regulated through interest rate control. On the contrary, financial systems that are based on profit and loss sharing would be a better alternative as it is free from the imperfections of the riba system and would enhance economic development. In the context of microeconomics, Islamic banking has a positive effect on an individuals’ social and economic status when achieving potential outputs, without the use of interest for capital. Islamic finance and banking has also improved the income distribution of people in need (through the payments of zakat). Hence, Islamic banking will be able to benefit all levels of society, including both investors and workers.

**Methodology**

To identify the important factors that establishes financial development in the selected OIC countries, this study used balanced panel data from the year 2000 to 2012 in seven OIC countries. In this study, the selected counties were chosen as these countries have been implementing Islamic finance since 1969, and has been utilizing a
dual banking system in their economy. The seven (7) selected OIC countries are Indonesia, Jordan, Kuwait, Malaysia, Saudi Arabia, Sudan and Yemen.

Liquid liabilities is an indicator that measures the size of financial development. This indicator determines the capacity of a bank to perform its core role in allocating funds between savers and firms. The past empirical literature that examined the impact of liquid liabilities on financial development have provided evidences of a significant and positive link between liquid assets and financial development (e.g. Ahlin & Pang, 2008; Odeniran & Udeaja, 2010; Rachdi & Mbarek, 2011; Hassan, Sanchez & Yu, 2011; Cojocaru, Hoffman & Miller, 2011; Ali, 2013).

As stated by Levine (1997), when the size of a financial system becomes larger, economic activities are impacted as funds are activated and channeled toward beneficial economic activities that would subsequently promote development. This factor has been examined thoroughly in past studies (e.g. Gilman & Haris, 2004; Kemal, Qayum & Hanif 2007; Lacheheb, Adamu & Akutson, 2013; Adu, Marbuah, Mensah, 2013; Ali, 2013; Aric, 2014; Alkhuzaim, 2014; Musamali, Nyamongo & Moyi, 2014; Amaira & Amairya, 2014; Rehman, Ali & Nasir, 2015).

This study employs the Pooled OLS regression, Random Effect and Fixed Effect model, and can be expressed in estimation function as follows:

\[
LFD_{it} = \beta_0 + \beta_1(LIF_{it}) + \beta_2(LLiq_{it}) + \beta_3(LQM_{it}) + \epsilon_{it} \quad \text{.........(4.3)}
\]

Where, \(FD\) is financial development and is measured by the ratio of domestic credit and private sector over GDP; \(IF\) is Islamic finance that is measured by Islamic banks to private sector through modes of financing to GDP; \(LIQ\) is the liquid liabilities of the financial system over GDP; \(QM\) is the broad money supply divided by GDP. \(\beta_0\) is the coefficient, where \(i = \) selected OIC countries (Indonesia, Jordan, Kuwait, Malaysia, Saudi Arabia, Sudan and Yemen), and \(\epsilon_{it}\) is the disturbance term.

The relationship between the components in Equation 4.3 is described as follows. Variable \(IF\) is assumed to have a positive effect and indicates that if the use of Islamic finance increases sharply, financial development will be more efficient. Variable \(LIQ\) has a positive impact
on financial development. Moreover, the variable on quasi money, $QM$, shows that an increase in money supply will have a positive impact on financial development.

**Result and Discussions**

This study examined the relationship between Islamic finance and economic growth in 7 selected OIC countries. This section is divided into two parts, which are the descriptive statistic and results of the fixed effect and random effect. The descriptive statistics analyze the overall data collected and identify the relationship between financial development, liquid liabilities, quasi money and Islamic finance. The data for the descriptive statistics are presented in Table 2.

**Table 2**

*Descriptive Statistics for Seven Selected OIC Countries*

| No | Variables                  | Mean  | Standard deviation | Minimum | Maximum |
|----|----------------------------|-------|--------------------|---------|---------|
| 1  | Financial development (FD) | 23.39 | 1.71               | 19.46   | 25.76   |
| 2  | Liquid liabilities (LIQ)   | 24.37 | 1.61               | 20.82   | 26.83   |
| 3  | Quasi money (QM)           | 26.72 | 0.16               | 26.59   | 27.00   |
| 4  | Islamic finance (IF)       | 21.92 | 1.71               | 18.68   | 25.27   |

*Source: Based on estimation by Authors*

Table 2 shows that the mean value for financial development from these selected countries during the period of study is 23.39. The minimum value for financial development is 19.46, while the maximum value is 25.76 and standard deviation is 1.71. The mean value for the financial development indicators show that quasi money (26.72) has the greatest mean value than liquid liabilities (24.37) and Islamic finance (21.92). In terms of standard deviation, Islamic Finance (1.71) has the highest value for standard deviation when compared to liquid liabilities (1.61) and quasi money (0.16). Therefore, this indicates that the difference between the means of the variables is less than two,
while the difference between standard deviations is less than one. The results also imply that the variance of the mean is not volatile, as reflected by the lower standard deviation values.

Table 3 presents the results of the pooled OLS, fixed effects and random effects on the variables and estimation from the seven OIC countries over the period of 2000 to 2012. In order to eliminate the co-linearity problem caused by the interaction term in the regression analysis, orthogonalizing (or residual centering) method was applied during the analysis process (Little et al., 2006; Geldhof et al., 2013).

The pooled OLS estimation results are presented in the second column of Table 3. The direct relationship of Islamic finance and liquid liabilities on financial development is positive and significant at the 1% significance level. The interaction term for quasi money shows a negative value of -1.57, which implies an inverse relationship with financial development and is significant at the 1% significance level.

Table 3

Analysis Result of Fixed Effect and Random Effect

| Variables                  | Pooled Model | Random Effects | Fixed Effects | Fixed effect with corrected standard errors |
|----------------------------|--------------|----------------|---------------|---------------------------------------------|
| Constant                   | 38.62***     | 35.25***       | 34.62***      | 38.62**                                     |
| Liquid liabilities (LLiq)  | 0.85***      | 0.82***        | 0.80***       | 0.85***                                     |
| Quasi money (LQM)          | -1.57***     | -1.41***       | -1.37***      | -1.57**                                     |
| Islamic finance (LIF)      | 0.27***      | 0.26***        | 0.27***       | 0.27***                                     |
| Number observation         | 91           |                |               |                                             |
| R-squared (R²)             | 0.90         | 0.90           | 0.90          | 0.90                                        |
| Multicollinearity (vif)    | 1.70         |                |               |                                             |
| Breush-Pagan LM test       | 176.64***    |                |               |                                             |
The pooled OLS estimator assumes that the error term is identical and independently distributed across countries that are uncorrelated with the explanatory variables. However, the pooled OLS estimation results may turn out to be an inconsistent estimator if there are unobserved individual effects involved such as inflation, political environment and stability. This would affect financial development and growth as these elements are not examined by the pooled OLS estimator. If the unobserved individual-specific effects are correlated with the explanatory variables, the estimations provided by the pooled OLS are biased and inconsistent (Hsiao, 1986). Columns 3 and 4 of Table 3 present the results of estimation using random effects and fixed effects estimator, respectively.

The applicability of the fixed and random effect models are tested using Hausman test. The Hausman test rejects the null hypothesis which indicates that the individual effects are uncorrelated with the explanatory variables in the model. Thus, the fixed effects model was found to be more appropriate than random effects model when making the comparisons for financial development. The null hypothesis of homoscedasticity is rejected, which implies that there is a heteroscedasticity problem in the error term. Therefore, to correct the heteroscedasticity problem, an adjustment is made using the robust standard error.

The estimation results of the fixed effects with panel corrected standard error model are presented in column 5 of Table 3. The estimated coefficient of liquid liabilities (Lliq) is positive and statistically significant at the 1% level of significance. The results indicate that when liquid liabilities increase by 1%, financial development will increase approximately by 0.85%. Hence, this concludes that the
liquid liabilities variable is an important factor in facilitating financial development, as assumed by the hypothesis, and is consistent with the findings from previous literature (e.g. Favara, 2003; Ahlin & Pang, 2008; Odeniran & Udeaja, 2010; Rachdi and Mbarek, 2011; Ali, 2013).

The coefficient for quasi money (Lqm) is negative but significant at the 5% level of significance. This implies that an increase of 1% in quasi money would substantially decrease financial development by 1.57%. As stated by Al-Malkawi et al., (2012), the negative relationship of quasi money on financial development can be attributed to the act of the business cycle rather than a representation of long-term relationship. Furthermore, consistent with the hypothesis, Islamic finance (Limf) is positive and significant at the 1% significance level with a coefficient of 0.27. This indicates that Islamic finance is fairly effective in enhancing financial development. These results are consistent with the findings from previous studies (e.g. Bahari, 2009; Saleh et al., 2013; Tabash & Dhankar, 2013).

**Conclusion**

This study concludes that Islamic finance and liquid liabilities have a positive and significant relationships with financial development. With regards to quasi money, this variable has a negative but significant relationship on financial development.

There are vast amounts of opportunity for industries to grow further through the increase of public awareness on the benefits of Islamic finance, establishing better financial infrastructures, and the enforcement of transparency and adherence to Shariah law. In addition, the governments of OIC countries should encourage banks to develop, improve, and utilize Islamic finance efficiently within their financial sector through the implementation of public and monetary policies. Many OIC participating countries such as Bahrain, Kuwait, Malaysia and UAE have already developed infrastructures for Islamic finance. However, countries, particularly those in the African region, have yet to develop new policies that introduce and implement Islamic finance infrastructure.

Apart from that, policymakers would need to develop regulatory and supervisory frameworks that encourages improvements in Islamic finance, especially through the introduction of more Shariah financial tools and products in OIC countries. The regulatory and supervisory
functions have become more prevalent in order to build a stronger Islamic finance sector that enables access to financial services for Muslims and individuals who are interested in investing in zero-interest markets or towards communities who are in need for sound and profitable investments. Malaysia has played an important role in Islamic finance across the globe. In 2006, the Malaysian government implemented a new category of licenses for International Islamic Banks under the Islamic Banking Act 1983. The licenses were issued to qualified foreign and Malaysian financial institutions to conduct businesses in international currencies. This regulation was enforced through the Malaysian Islamic banking system and has successfully garnered the attention of many foreign companies to invest funds in Malaysia. Moreover, Malaysia has grown to become one of the most successful country that have continued to implement Islamic finance. Hence, other OIC participating countries such as Yemen and Lebanon which have recently started implementing Islamic finance, could draw on the experience from Malaysia.

References

Abdul-Majid, M., Saal, D. S., & Battisti, G. (2010). Efficiency in Islamic and conventional banking: An international comparison. *Journal of Productivity Analysis, 34*(1), 25-43.

Addawe, S. (2012). What are the impacts of the global financial crisis on Islamic banking system and how Islamic bank spared from the crisis?. *Master’s Thesis*. Helsinki, Finland: Aalto University School of Economics.

Adu, G., Marbuah, G., & Mensah, J. T. (2013). Financial development and economic growth in Ghana: Does the measure of financial development matter?. *Review of Development Finance, 3*, 192–203.

Ahlin, C., & Pang, J. (2008). Are financial development and corruption control substitutes in promoting growth?. *Journal of Development Economics, 86*(2), 414-433.

Akacem, M., & Gilliam, L. (2002). Principles of Islamic banking: Debt versus equity financing. *Middle East Policy, 9*(1), 124–138.

Al-Jarrah, I., & Molyneux, P. (2005). Efficiency in Arabian Banking. In: Iqbal M, Wilson R (eds). *Islamic Perspectives on Wealth Creation*. Edinburgh: Edinburgh University Press.

Ali, S. A. S. (2013). Financial intermediation and economic growth in Sudan: An empirical investigation, 1970-2011. *British Journal of Economics, Management & Trade, 3*(4), 332-358.
Alshammari, S. H. (2003). Structure-conduct-performance and Efficiency in Gulf Co-operation Council. *PhD thesis*, University of Wales, Bangor.

Amaira, B., & Amairya, R. (2014). Financial intermediation and economic growth in Tunisia: An econometric investigation. *International Journal of Business and Behavioral Sciences, 4*(3).

Aric, H. K. (2014). The effects of financial development on economic growth in the European Union: A panel data analysis. *International Journal of Economic Practices and Theories, 4*(4), 466-471.

Ascarya. (2010). The lack of profit and loss sharing financing in Indonesia’s Islamic banks: revisited. *Review of Indonesian Economic and Business Studies, 1*(1), 57–80.

Bacha, O. I. (1995). Conventional versus mudarabah financing: An agency cost perspective. *Journal of Islamic Economics, 4*(1), 33–49.

Baele, L., Farooq, M., & Ongena, S. (2010). Of religion and redemption: Evidence from default on Islamic loans (Replaced by EBC DP 2012-008). *EBC Discussion Paper, 2010*, 1-46.

Bahari, Z. (2009). The changes of product structure in Islamic banking: Case study of Malaysia, Paper presented at Two-Day Conference on *Islamic Perspectives on Management and Finance, United Kingdom* organized by School of Management, Leicester University, 2-3 July 2009.

Baldwin, K., Dar, A. H., & Presley, J. R. (2002). On determining moral hazard and adverse selection in the Islamic firm. In: H. Ahmed (eds). *Theoretical foundations of Islamic economics*. Islamic Development Bank, 145–166.

Basher, M. (1999). Risk and profitability measures in Islamic banks: The case study of two Sudanese banks. *Islamic Economic Studies, 6*(2), 1-26.

Caporale, G. M., Rault, C., Sova, R., & Sova, A. (2011). Financial depth and economic growth in new EU members, *Rue, 269770*,2.

Chapra, M. U. (2000). *The future of economics: An Islamic perspective*. Leicester, U.K: The Islamic Foundation.

Choudhury, M. A., & Hussain, M. (2005). A paradigm of Islamic money and banking. *International Journal of Social Economics, 32*(3), 203–217.

Čihák, M., & Hesse, H. (2010). Islamic banks and financial stability: An empirical analysis. *Journal of Financial Services Research, 38*(2), 95-113.

Cojocaru, L., Hoffman, S. D., & Miller, J. B. (2011). Financial development and economic growth in transition economies: Empirical evidence from CEE and CIS countries. *Working Paper Series*, 2011-2022.
Cole, H. L., & Kocherlakota, N. (1998). Zero nominal interest rates: Why they’re good and how to get them. Federal Reserve Bank of Minneapolis Quarterly Review, 22, 2-10.

Darrat, A. F. (2002). The relative efficiency of interest-free monetary system: Some empirical evidence. Quarterly Review of Economics and Finance, 42, 747-64.

Demetriades, P., & Law, S. H. (2006). Finance, institutions and economic development. International Journal of Finance and Economics, 11(3), 245-260.

Derbel, H., Jarboui, B., Chabchoub, H., Hanafi, S., & Mladenovic, N. (2011, May). A variable neighborhood search for the capacitated location-routing problem. In Logistics (LOGISTIQUA), 2011 4th International Conference on (pp. 514-519). IEEE.

Dusuki, A. W. (2008). Understanding the objectives of Islamic banking: A survey of stakeholders’ perspectives. International Journal of Islamic and Middle Eastern Finance and Management, 1(2), 132-148.

El-Galfy, A., & Khiyar, A. K. (2012). Islamic banking and economic growth: A review. The Journal of Applied Business Research, 28(5), 943-955.

Favara, G. (2003). An empirical reassessment of the relationship between finance and growth. In Working Paper No. 03/123. Washington: International Monetary Fund.

Friedman, M. (1969). The optimum quantity of money, in the optimum quantity of money and other essays. Chicago: Aldine.

Geldhof, G. J., Pornprasertmanit, S., Schoemann, A. M., & Little, T. D. (2013). Orthogonalizing through residual centering. Educational and Psychological Measurement, 73(1), 127-146.

Ghafoor, A. L. M. A. (1999). Islamic banking and finance: Another approach. Toronto: Appgetc Publications.

Gillman, M., & Harris, M. N. (2004). Inflation, financial development and growth in transition countries (No. 23/04). Monash University, Department of Econometrics and Business Statistics.

Goaied, M., & Sassi, S. (2010). Financial development and economic growth in the MENA region: What about Islamic banking development. Institut des Hautes Etudes Commerciales, Carthage.

Haque, N. H., & Mirakhor, A. (1986). Optimal profit-sharing contracts and investment in an interest-free Islamic economy, Working Paper WP/86/12, IMF, Washington D.C.

Haron, S., & Ahmad, N. (2000). The effects of conventional interest rates and rate of profit on funds deposited with Islamic banking system in Malaysia. International Journal of Islamic Financial Services, 1(4), 1-7.
Haron, S., & Hisham, B. (2003). International seminar on Islamic Wealth Creation. *Wealth Mobilization by Islamic Banks: The Malaysian Case*. Durham, United Kingdom: University of Durham.

Hassan, M. K., Sanchez, B., & Yu, J. S. (2011). Financial development and economic growth: New evidence from panel data. *The Quarterly Review of Economics and Finance, 51*, 88-104.

Jobarteh, M., & Ergec, E. H. (2017). Islamic finance development and economic growth: Empirical evidence from Turkey. *Turkish Journal of Islamic Economics*, 4(1), 31-47.

Kaleem, A. (2000). Modelling monetary stability under dual banking system: The case of Malaysia. *International Journal of Islamic Financial Services, 2*(1), 21-42.

Kemal, A. R., Qayyum, A., & Hanif, M. N. (2007). Financial development and economic growth: Evidence from a heterogeneous panel of high income countries. *The Lahore Journal of Economics, 12*, 1-34.

Khaldi, K., & Hamdouni, A. (2011). Islamic financial intermediation: Equity, efficiency and risk. *International Research Journal of Finance and Economics, 65*, 145-160.

Khan, M. M., & Bhatti, I. M. (2006). Why interest free banking and finance movement failed in Pakistan. *Humanomics, 22*(3), 145-61.

Khoutem, B. J., & Nedra, A. N. (2012). Islamic participative financial intermediation and economic growth. *Journal of Islamic Economics, Banking and Finance, 8*(3), 44-59.

Kia, A., & Darrat, A. F. (2003), “Modelling money demand under the profit-sharing banking scheme: Evidence on policy invariance and long-run stability”, paper presented at the ERF’s 10th Annual Conference, 16-18 December, Marrakech.

King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth: Theory and evidence. *Journal of Monetary Economics, 32*(3), 513-542.

Lacheheb, M., Adamu, P., & Akutson, S. (2013). Openness, financial development and economic growth in Algeria: An ARDL bound testing approach. *International Journal of Economics, Finance and Management Sciences, 1*(6), 400-405.

Lee, M. P., & Detta, I. J. (2007). *Islamic Banking and Finance Law*. Kuala Lumpur: Pearson Malaysia Sdn Bhd.

Levine, R. (1997). Financial development and economic growth: Views and agenda. *Journal of economic literature, 688*-726.

Little, T. D., Bovaird, J. A., & Willian, K. F. (2006). On the merits of orthogonalizing powered and product terms: Implications for modeling latent variable interactions. *Structural Equation Modeling, 13*, 479-519.
Matthews, R., Tlemsani, I., & Siddiqui, A. (2002). *Islamic finance*. Working Paper, Centre for International Business Policy, Kingston Business School.

McKinnon, R. I. (1973). *Money and capital in economic development*. The Brookings Institution: Washington DC.

Mirakhor, A. (2000). “General characteristics of an Islamic economic system”, in Siddiqi, A. (Ed.), *Anthology of Islamic Banking*, Institute of Islamic Banking and Insurance, London, pp. 11-31.

Musamali, A. R., Nyamongo, M. E., & Moyi, D. E. (2014). The relationship between financial development and economic growth in Africa. *Research in Applied Economics, 6*(2), 190-208.

Odeniran, S. O., & Udeaja, E. A. (2010). Financial sector development and economic growth: Empirical evidence from Nigeria. *Economic and Financial Review, 48*(3), 91-124.

Qureshi, A. I. (2003). *Islam and the theory of interest, second ed.* New Delhi, India: Kitab Bhavan.

Rachdi, H., & Mbarekk, B. H. (2011). The causality between financial development and economic growth: A panel data cointegration and GMM system approaches. *International Journal of Economics and Finance, 3*(1), 143-151.

Rehman, Z. M., Ali, N., & Nasir, M. N. (2015). Financial development, savings and economic growth: Evidence from Bahrain using VAR. *International Journal of Financial Research, 6*(2), 112-123.

Samad, A. (2004). Performance of interest free Islamic banks vis-a`-vis interest based conventional banks of Bahrain. *Journal of Economics and Management, 12*(2), 115-29.

Samad, A., & Hassan, M. K. (2002). The performance of Malaysian Islamic bank during 1984-1997: An exploratory study. *International Journal of Islamic Financial Services, 1*(3), 24-45.

Shaikh, A. S. (2012). Examining theories of growth and development and policy response based on them from Islamic perspectives. *Journal of Islamic banking and finance, 29*(2).

Srairi, S. A. (2010). Cost and profit efficiency of conventional and Islamic banks in GCC countries. *Journal of Productivity Analysis, 34*(1), 45-62.

Tabash, M. I., & Dhankar, R. S. (2014). Islamic banking and economic growth: An empirical evidence from Qatar. *Journal of Applied Economics and Business, 2*(1), 51-67.

Wilson, C. (1979) “An infinite horizon model with money”, In: Green, J. R., Scheinkman, J. A. (Eds.), *General Equilibrium, Growth, and Trade: Essays in Honor of Lionel McKenzie*. Academic Press, New York, NY.