

## HOW DOES ISLAMIC BANKING SUPPORT ECONOMIC GROWTH?

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**ABSTRACT** – Some researchers have argued that the financial system has a vital role in economic growth. Islamic banking that has existed widely in many countries is expected to have a positive role in economic growth. This study aims to examine the impact of Islamic bank financing on economic growth in QISMUT countries. To compare with other full Islamic banking systems, Iran and Sudan also included in this study. By using annual panel data (2005-2015), this paper utilizes an approach to multiple mediating analysis models. The findings demonstrate that Islamic banking financing does not significantly impact economic growth directly. However, Islamic banking financing can possibly influence economic growth indirectly through investment and consumption spending.

**Keywords:** Islamic banking financing, Economic growth, Mediating analysis

**ABSTRAK** – *Bagaimanakah Peran Perbankan Syariah dalam Pertumbuhan Ekonomi?* Beberapa peneliti berpendapat bahwa system keuangan memiliki peran penting dalam pertumbuhan ekonomi. Perbankan Islam yang telah ada secara luas di banyak negara diduga memiliki peran positif dalam pertumbuhan ekonomi. Penelitian ini bertujuan untuk menguji pengaruh pembiayaan bank Islam pada pertumbuhan ekonomi di negara QISMUT. Iran dan Sudan dimasukkan dalam objek penelitian ini sebagai pembandingan penggunaan sistem keuangan Islam. Menggunakan data panel tahun 2005-2015, penelitian ini menggunakan pendekatan analisis media dengan banyak faktor. Hasil penelitian menunjukkan bahwa pembiayaan bank Islam tidak dapat mempengaruhi pertumbuhan ekonomi secara langsung. Akan tetapi, Bank Islam dapat mempengaruhi pertumbuhan ekonomi secara tidak langsung, yaitu melalui investasi dan konsumsi.

**Kata Kunci:** *Pembiayaan bank Islam, Pertumbuhan ekonomi, Analisis mediasi*

## **INTRODUCTION**

Islamic finance is one of the fastest-growing sectors in the global financial system in Islamic countries. Islamic financial industry has developed since 1950 in many different Islamic countries. Nowadays, this industry has even widespread to non-Islamic countries. Surprisingly in the mid-1990s, the financial asset of Islamic finance reached USD 150. From then on, this figure surpasses USD 1,78 trillion in 2018. The most interesting part about this was, 71.7 % of this entire financial asset was dominated by banking (Islamic Financial Services Board, 2019). Islamic banking and its assets were mostly spread in Qatar, Indonesia, Saudi Arabia, Malaysia, UAE, and Turkey (abbreviated as QISMUT countries). In the future, these six countries expected will play a significant role in the development of global Islamic finance. The reason behind this prediction is the huge population of the QISMUT countries which accounts for more than half of the world population. This potential is likely to help the growth of the financial sector and in the end, also help develop economic growth (Beck et al., 2000)

However, other researchers suggested that the growth of financial sector does not significantly influence the growth of the economy, whether the financial system is more bank-based or market-based (Levine, 1997). The specific organizational alignments that offer financial services to the economy are insignificant; the important one is the condition of the whole financial development (Barajas et al., 2013; King & Levine, 2016; Pradhan et al., 2013). Cecchetti & Kharroubi (2012) and Beck et al., (2000) also found that there is no significant impact between financial development and economic growth. So far, researches discussing whether financial growth can affect economic growth have conducted in countries with a single monetary system called interest system. Therefore, it is important to conduct a research to prove whether financial sector play an important role in countries with interest free system (done by Islamic banks)

Mishkin, (1995) stated that the most significant financial channel influencing economic growth is through investment and consumption spending. In line with the statement, Islamic banks have developed through investment and consumption without running an interest system. Instead, they used what is so-called by Mudaraba and Musharaka (Ibrahim, 2018. Mudaraba, in detail, is a system of trust in Islamic finance, in which one makes an investment (rab-ul-maal) and the other use the money in a business enterprise (mudarib).



Musharaka is a type of joint enterprise through which the partners share their profit or loss according to a predetermined ratio, like Mudaraba. From this financial system, it can be assumed that Islamic bank asset affects the growth of the investment (Nisak & Ibrahim, 2014). However, to meet market needs, Islamic banks prefer to do selling buying contracts, Murabahah contract rather than Mudaraba and Musharaka (Ibrahim, 2015). Islamic Financial Services Board (2016) reported that the most used financing system in Islamic bank is Murahabah. This will likely increase the rate of consumption because there is a financing facility offered by Islamic banks (Hamza & Saadaoui, 2018).

What makes this research is different from other studies under the same topic is the inclusion of Iran and Sudan as other important Islamic countries, beside QISMUT. Iran and Sudan have fully implemented Shariah-compliant (Islamic law) in their banking system, which is interest-free. Based on Islamic Financial Services Board (2019), Iran sustained its historical position as the largest market share since 2015. In case of Sudan, although Sudan has used an interest-free system in its monetary system for a long time, the share of its global asset was under 1%. The different high rate of asset between Iranian and Sudan Islamic banking system will also help to understand whether interest-free banking systems will positively impact economic growth.

Another reason that motivated us to conduct this study is that there were limited sources that explained how Islamic banking, represented by the number of credits provided to the people (in Islamic banking system, this is called financing) could affect economic growth. Previous studies conducted by Furqani & Mulyany (2009), Tabash & Dhankar (2014), Tabash & Anagreh (2017) investigated the role of Islamic banks on economic growth directly by using GDP variables to represent the economic growth. Daly & Frikha (2016), Caporale & Helmi (2018) included some countries on their study without differentiating the country's financial system, Lebdaoui & Wild (2016) in Southeast Asia country, and Boukhatem & Moussa (2018) in MENA region. The similarity of these studies is using the country where asset capitalization of Islamic banks is high. What about the opposite? The low asset capitalization of Islamic banking resulted in the impact of Islamic banking role (Yüksel & Canöz, 2017). On the contrary, Goaiied & Sassi (2010) found that Islamic banking financing is insignificant to economic development.

The existence of Islamic banks in some countries, thus, benefits economic growth, particularly through its resources. Despite this appeal, it is also



important to note that they have a lower market share compared to those of the entire banks in a country (Reuters, 2018; Duasa, 2018). According to Keynesian, the source of growth are investment, consumption, and government expenditure as its primary sector. From this phenomenon, a further question must be addressed, if Islamic banking financing could possibly affect economic growth, then through which sector it would occur?

This study is expected to broaden the scope of other research findings, concerning the role of Islamic financial sectors, which is still in its early stage of development. However, the existence of Islamic banks and their system still is not able to shift ordinary banks and their conventional system (interest-based). In this case, Islamic banks exist to meet the need of financial system (Imam & Kpodar, 2015).

Meanwhile, it does not rule out that the possibility to Islamic banks with a small asset capitalization would have an impact on economic growth globally because their capital asset growth rate continues to increase (Islam, 2016). Moreover, each government always finds any sources to increase national income through various sectors and financial sectors are considered as a promising industry. The current study also contributes to the process of policymaking, especially in improving Islamic banking sector which also leads to economic growth. Besides, it is essential to explain how Islamic banking impacts economic growth from two aspects: investment and consumption. This research attempts to investigate the following questions. First, does Islamic banking financing have a significant impact on economic growth directly or indirectly through investment and consumption? Second, is there any difference between countries implementing a full Islamic banking system and those who use dual banking system (Islamic banking and non-Islamic banking system) to enhance economic growth? Additionally, this research is conducted to answer a question about a direct or an indirect effect of capitalization asset of Islamic banks, which is still low in some countries.

## **LITERATURE REVIEW**

Several researchers have found the role of the financial sector on economic growth. Preceded by Schumpeter in 1911, who argued that financial intermediaries play a pivotal role in economic development because they used savings to finance any business sectors (Schumpeter, 1934). (Beck et al. (2000), Levine (2003), Law & Singh (2014) continued Schumpeter's, who found that



there was a threshold effect in the finance-growth relationship. Nevertheless, Pradhan et al. (2013), Rioja & Valev (2004), proved that the nexus of financial developments depends on the position of a country.

Having considered the importance of the role of financial intermediaries, some researchers tried to analyze how Islamic banks take part in economic growth. Levine (2003), Cecchetti & Kharroubi (2012), Pradhan et al. (2013), (Beck et al. (2000), Law & Singh (2014), Goaid & Sassi (2010) used credit as an indicator of the development of financial intermediaries. However, other researchers do not use credit as an indicator but using Islamic banking financing instead, to show the role of Islamic bank on economic growth. Furqani & Mulyany (2009), Abduh & Azmi Omar (2012), Farahani & Sadr (2012) studied the impact of Islamic bank's financing on economic growth. They found that there was a significant short-term and long-term effect on the correlation between Islamic financial development and economic growth. The effect appeared to be a bi-directional effect. This study employs empirical evidence to prove the role of Islamic banks' financing on the nation's economic condition (Caporale & Helmi, 2018; Farahani & Sadr, 2012; Furqani & Mulyany, 2009; Khaliq & Thaker, 2017). However, another finding suggested by Goaid & Sassi (2010), showed that there was no significant relationship between banking and economic growth, which reinforces the idea that banks do not spur economic growth (Goaid & Sassi, 2010; Yüksel & Canöz, 2017). However, they also found that Islamic bank total loans and credit to private sectors is associated with economic growth.

Other research findings suggested that the existence of Islamic banking positively impact economic growth, especially in financial sector (Abduh & Azmi Omar, 2012; Yüksel & Canöz, 2017; Zarrouk et al., 2017). Tohirin & Ismail (2011) stated that Islamic bank still positively impacts economic growth. These studies used a regional country/divided country where Islamic banking is well-established, in which a survey from a high capitalized asset of Islamic banks suggested a clear relationship between the role of Islamic banks and economic growth. However, they do not give an analysis of how significant the impact of Islamic banking sector development on economic growth, especially in terms of statistics. Therefore, this research tries to analyze how big the effect of Islamic banks on economic growth. This research also conducts cross-sectional countries with different sizes of market capitalization to get the whole picture of the impact of Islamic bank on economic growth.



Tohirin and Ismail (2011) argued how Islamic banking financing through equity-based financing could impact the economic growth. Mudaraba, Musharaka, and Murabaha (MMM) financing become genuine tools to promote the economic growth as an Islamic bank offers two forms of investment, which are equity-based and debt-based financing. Bank-based view considers equity-based financing will build a stronger basis in describing finance-growth relation under Islamic bank system.

According to Tohirin and Ismail (2011), the equity mode of financing in the form of Mudaraba and Musharaka contracts represents a mode of profit and loss sharing that will bring a better approach for transmitting finance to the real economic sector. As it is commonly known that the better the economic sectors, the better the economic growth. Next, the debt-based mode of financing through Murabaha contracts which use profit margin, will strengthen monetary transmission into the real economic sector, especially consumption expenditure. Thus, the existence of Islamic banking can provide more noticeable numbers of equity-based financing via Mudaraba and Musharaka financing. The bank-based view might have a more reliable basis to prove Islamic banks essential role in leading more economic activities in the real sector and finally level up the economic growth.

Limited studies use a mediator variable that focuses on the impact of Islamic banking financing on economic growth through mediation variables. Most researchers try to correlate the effect of Islamic Banking financing on the economic growth by using GDP directly (Abduh & Azmi Omar, 2012; Furqani & Mulyany, 2009; Tabash & Anagreh, 2017). This mediator variable is necessary to explain through which Islamic banking, especially on the financing sector, could affect economic growth. In the view of Islamic banking assets market share, it is just a few amounts if compared with overall banking assets. This finding of economic growth could give a spurious conclusion. Thus, this research proposes investment and consumption as intervening mediator variables.

Several researchers used the mediator variable in their study to give a more comprehensive explanation. Justesen (2008) used the investment variable as an intervening variable to examine the effect of economic freedom on the economic growth (Justesen, 2008). Unnikrishnan & Jagannathan (2015) also used financial inclusion as a mediator variable to estimate the impact of gross domestic product (GDP) on the human development index (HDI). They found



that financial inclusion is a mediation component in affecting the economic development of the human development index (HDI) (Unnikrishnan & Jagannathan, 2015). Another study conducted by Belal (2016) discusses the effect of economic openness as the mediator variable on the relationship between foreign direct investment and economic growth in Sudan. His research shows that economic openness partially mediates the relationship between FDI and economic growth. By using a mediator variable, this study is able to explain that FDI did not directly impact economic growth. Instead, the effect of FDI depended on the degree of economic openness in Sudan (Belal, 2016).

Lackmann (2014) stated that QISMUT (Qatar, Indonesia, Saudi Arabia, Malaysia, UAE, Turkey) are six successful countries which can develop Islamic finance growth in the national and global level. Likewise, Yildirim (2015) based on his studies, which included 56 Islamic banks in QISMUT countries, conducted in 2012 and 2014 found that there is a similar financial structure applied by QISMUT countries in operating Islamic banks. For that reason, it is important to conduct this current study on the Islamic banking sector to get empirical information about its impact on economic growth by focusing on Islamic banks in QISMUT countries, including Iran and Sudan, using mediation analysis. Although the current study does not cover all Islamic banks, the object of the study provides an overview of two-third of the Islamic banking system. The difference of the current research from previous researches is that we add Iran and Sudan as a comparison to QISMUT countries because those two countries applied the full Islamic financial system.

## **HYPOTHESIS DEVELOPMENT**

The argument in this research is that Islamic banking financing is expected to affect investment and consumption rate, which in turn impacts the economic growth. The roles of Islamic banking financing on investment are explained as follows:

First, in monetary transmission theory, the increasing number of bank reserves and bank deposits also increases the number of bank loans called credit. Because many borrowers are dependent on bank loans to finance their activities, it increases loans that will cause investment spending (and possibly consumer) to rise (Mishkin, 2007). Law and Singh (2014) and Pradhan et al. (2013) proved this theory. Secondly, the mode of financing offered by the Islamic bank was based on assets backed (Tohirin & Ismail, 2011). Mudaraba and Musharaka contracts used equity mode of financing, showing profit and



loss sharing scheme, which will serve a better channel for transmitting finance to real economic activities. A productive performance from profit and loss sharing scheme reflects investment activity and, in the end, also impacts economic growth. Third, Furqani and Mulyany (2009), Farahani and Sadr (2012), Tabash & Dhankar (2014) proved that there was a bi-directional relationship between Islamic banking financing on investment. However, another study conducted by Goaid and Sassi (2010) suggested that Islamic bank financing had an insignificant relation to investment. Therefore, this research proposed the first hypothesis.

H1: Islamic banking financing has a significant impact on investment.

The second channel in which Islamic banking financing might affect economic growth is through consumption spending. Islamic banking financing has proposed a profit and loss sharing scheme with Mudaraba and Musharaka contract (partnership contract) based on a profit-loss sharing scheme rather than interest (IFSB, 2018). The present development shows that the Murabaha contract is the most growing contract used by the Islamic banking system (Ibrahim & Alam 2017). Moreover, this debt-like contract will continue to dominate Islamic banks' assets in the near future (Alam & Parinduri 2016). Financing to the household or personal investment is the most significant exposure for Islamic banks, plausible given the generally strong consumer-led demand for Islamic banking products in the sample markets. This sector represented almost 42% of total Islamic banks' financing exposures. (IFSB 2019). Because of Murabaha financing is a mark-up pricing-based and mostly refer to consumer financing, it is expected to affect consumer spending. Credit card facility by the Islamic bank, according to Idris (2012), this credit facility does not seem to give different behavioral effects on consumption with the conventional one. Léon and Weill (2018) also argued that Islamic bank provides more access to credit than the traditional banking system (interest-based bank).

Moreover, if this Murabaha contract entirely used consumption sectors, it is expected to have a more impact compared with the investment sectors. The mode of financing offered by the Islamic bank has driven the investment sector to grow. However, Hamza and Saadaoui (2018) found that this scheme presents a debt financing channel through the Islamic bank.

H2: Islamic banking financing has a significant impact on consumption.





The third hypothesis, built based on the theory of investment and consumption, is the functions of aggregate output. Karim et al. (2012), Alper (2018) and Spasojević and Đukić (2018) stated that consumption and investment indeed impact economic growth in the short-run, and Radulescu et al. (2019) found that on the consumption result is hesitant. As the financial institution, especially the banking sector has a significant role in economic growth, the increase of investment and consumption in general, will increase the aggregate output. Eller et al. (2006), combining the FDI-growth and the finance-growth-literature, found that the level and quality of foreign investment influences the financial sectors' contribution. Consider the low capitalization of the global market share of Islamic banks, it will be difficult to predict the direct influence of Islamic banks on economic growth. From the H1 and H2 hypotheses, if Islamic banking expected to have a significant impact on investment and consumption, Islamic banking financing (any contract) is expected to improve economic growth, although in an indirect way.

H3: Islamic banking financing has a significant impact indirectly on the economic growth mediated by investment and consumption.

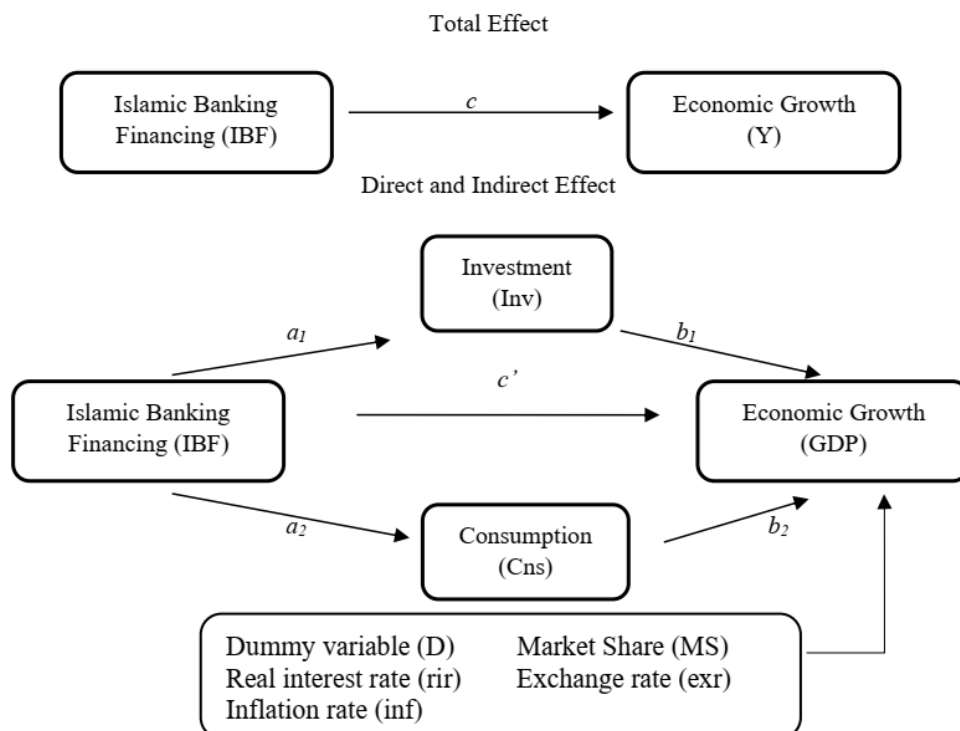


Figure 1. Conceptual Framework



## RESEARCH METHOD

Figure 1 shows the primary purpose of this research. Single arrows indicate causation between exogenous or intermediary variables and the dependent(s). Arrows also connect the error terms with their respective endogenous variables. The use of control variables shows that current study utilizes the use of multiple mediator models. The testing of numerous mediation models has been developed in the form of script macros by Kristopher and Hayes (Preacher & Hayes, 2008).

The model can be explained through the following three stages. First, to separate the effect of Islamic banking financing on economic growth. Thus, the impact of variable Islamic banking financing on the economic growth can be divided into two parts: 1) the direct effect of Islamic banking financing on economic growth, and 2) the indirect impact of Islamic banking financing on economic growth via consumption and investment. The direct and indirect effect of Islamic banking financing on economic growth is combined as a total effect. Second, a direct effect: The direct effect is the effect of Islamic banking financing on economic growth when the mediator is included in the model. In the diagram above, the direct effect is shown as  $c'$ . Third, indirect effect: The indirect effect is a measure of how much of the effect of Islamic banking financing on economic growth that is being mediated. Another term for the indirect effect is the mediation effect. In a classical mediation model, the indirect effect is obtained by multiplying "a" coefficient with "b" coefficient in the diagram above (figure 1).

The equation of mediation analysis from figure 1 is described as follows:

Direct Effect:

$$GDP_t = i_1 + cIBF_{it} + \gamma_1 D_{it} + \gamma_2 MS_{it} + \gamma_3 rir_{it} + \gamma_4 exr_{it} + \gamma_5 inf_{it} + e_1 \quad (1)$$

Mediation effect:

$$Inv_t = i_3 + a_1 IBF_{it} + \gamma_1 D_{it} + \gamma_2 MS_{it} + \gamma_3 rir_{it} + \gamma_4 exr_{it} + \gamma_5 inf_{it} + e_2 \quad (2)$$

$$Cns_t = i_4 + a_2 IBF_{it} + \gamma_1 D_{it} + \gamma_2 MS_{it} + \gamma_3 rir_{it} + \gamma_4 exr_{it} + \gamma_5 inf_{it} + e_2 \quad (3)$$

Indirect effect:



$$GDP_t = i_2 + c'IBF_{it} + b_1Inv_t + b_2Cns_t + \gamma_1D_{it} + \gamma_2MS_{it} + \gamma_3rir_{it} + \gamma_4exr_{it} + \gamma_5inf_{it} + e_3 \quad (4)$$

## RESULT AND DISCUSSION

### Direct Effect, Indirect Effect, and Total Effect

The direct effect of Islamic banking financing on economic growth is the  $c'$  path (figure 1), quantified as the non-standardized regression weight for Islamic banking financing in a model to predict economic growth from both Islamic banking financing and mediators. It quantifies how two cases differ by one measurement unit on Islamic banking financing, but which are equal on mediators are expected to differ on economic growth. The results from data processing, based on Hayes and Preacher (2011), show that the Islamic banking financing in QISMUT countries plus Iran and Sudan is statistically insignificant toward the economic growth directly (see table 1), with p-value in 0.1131 (more than 0.05).

Table 1. Direct Effect and indirect effect of mediation analysis

Variable impact	Direct	Through Inv	Through Cns	Total	p-value
IBF to Inv	0.2187			0.2187	0.7160**
IBF to Cns	0.8274			0.8274	0.0320*
Inv to GDP	1.3386			1.3386	0.0000*
Cns to GDP	1.0971			1.0971	0.0000*
IBF to GDP		$(0.2187 \times 1.3386) =$ 0.2927	$(0.8274 \times 1.0971) =$ 0.9078	1.2005	0.0043*

Notes: entries in \* and \*\* are significant at 5% and 10% significance levels, respectively.

The finding of mediation analysis is shown through the total value of the indirect effect. The total value of the Indirect Effect, with p value is 0.0043, which means that the Total Indirect Effect is significant. It affirms that Islamic banking financing significantly impacts the economic growth indirectly through the mediation variables, which are investment and consumption spending. As shown in Table 1, the changes in the mediating variable, investment and consumption spending, will improve the economic growth. A change in investment spending by one unit will increase the economic growth by 1.3386 units. Meanwhile, a change in consumer spending will improve the economic growth by 1.0971 units. The indirect effect of Islamic banking financing on economic growth through consumption spending is bigger than the economic growth through investment spending.



## Hypothesis Testing

Hypothesis test of Islamic banking financing is described in table 3. It shows that Islamic banking financing is positively significant in affecting investment spending; investment spending will increase by 21.8 million USD, along with the increase in Islamic banking financing for 1 million USD. This finding is similar to the study from Furqani and Mulyany (2009) and Daly and Frikha (2016), stating that Islamic Bank Financing affects investment spending. This finding indicates that the increase of Islamic banking financing would also increase the investment rate represented by the increasing of the Gross Fixed Capital Formation.

Table 2. Model summary estimation

Model	Coefficient	Standard error	p value	Adjusted R <sup>2</sup>
Equation 1	0.1214	0.7580	0.1131	
Equation 2	1.3386	0.1299	0.0000*	
Equation 3	1.0971	0.0572	0.0000*	
Equation 4	1.2005	0.3583	0.0043*	0.9847

Notes: entry in \* is significant at 5% significance levels.

The same result showed that Islamic banking financing is significantly impacting on consumption spending. The effect of Islamic Banking Financing toward consumption is statistically significant at 5 percent ( $p < 0.05$ ) (Table 2). This effect shows a positive nexus, which means that if Islamic Banking Financing increases 1 million US\$, it could raise the consumption spending for 49.1 million US\$. From these results, the impact of Islamic banking financing higher on consumption pending (82.74%) compared to investment spending (21.87%). The domination of Murabahah mode financing in Islamic bank is proven to increase the consumption spending.

Equation 4 describes the mediation analysis of Islamic banking and the control variable's impact on economic growth. This finding proves that Islamic banking indirectly affects the economic growth mediated by investment and consumption. Moreover, Islamic banking financing impacts the economics growth indirectly-only, with no direct effect. The type of mediation is indirect-only mediation, neither complementary mediation nor competitive mediation (Zhao et al., 2010). The finding explains that a unit increase in Islamic banking financing could increase the economic growth by 1.2005 units indirectly through investment and consumption spending. The result implied from the



indirect effect of Islamic banks through investment and consumption indicated that the policymaker needs to improve their financing asset.

Lead to the control variables (Table 3), the size of Islamic banking assets in QISMUT and two countries (Iran and Sudan) has a statistically significant impact on the economic growth. The positive coefficient of market share variable shows that the interest-free system applied by Islamic banks will positively impact on the economic growth. This finding is consistent with the study by Abedifar et al. (2016) that a more significant market share of Islamic banks is associated with higher efficiency of conventional banks, which in turn boosts the economic growth (Abedifar et al., 2016). However, this finding opposes the result by Daly and Frikha (2016) that the market share of Islamic banking is insignificant to the economic growth since this research used a more significant market size than the previous studies.

Table 3. Partial effect of control variables on dependent variable

	<b>coefficient</b>	<b>standard error</b>	<b>t</b>	<b>p value</b>
Market Share	5.9726	0.6101	9.7892	0.0000*
Dummy	-541.7348	53.1287	-10.1966	0.0000*
Exchange rate	0.0009	0.0011	0.8183	0.4156
Real interest rate	-1.1595	0.4744	-2.4444	0.0167*
Inflation	-0.0821	0.6238	-0.1316	0.8956

Notes: entry in \* is significant at 5% significance levels

The dummy variable testing that describes the use of Shariah compliance on the financial system shows a negative sign. This sign shows the lower impact of Islamic banking financing if it continues using consumption financing rather than the investment one. This finding is consistent with Tohirin & Ismail (2011), where a lower impact of consumption financing (*Murabaha*), it might be inferred that profit-loss sharing schemes should be advanced to a more significant number. It is important for the authority of Islamic banking to push their profit-loss sharing financing (i.e., *Mudaraba* and *Musharaka*) to reduce reliance on non-profit-loss sharing financing (*Murabaha*), due to the potential of positive impacts of profit-loss sharing system to the stability of the financial system. These modes of financing do not depend on interest rate fluctuation so that high economic growth can be realized.

Subsequently, the exchange rate does not significantly affect the economic growth. The reason for the lack of the impact of the exchange rate is caused by using a fixed exchange rate relative to the US dollar in QISMUT plus Iran and Sudan countries. Because the object of the current study is a cross-national data level, it has different implications on the effect of the exchange rate and economic growth across countries, as stated by Rapetti et al. (2011). This



finding will likely be different if further research uses the standard exchange rate against the other currencies. Moreover, without using the fixed rate, the exchange rate in Malaysia and Turkey from 2005 to 2015 is likely to remain, with the exchange did not reach 1 point each year.

A different result shows the real interest rate effect. The real interest rate has a negatively significant impact on the economic growth. This finding confirms the study from Shaukat et al. (2019) that a high-interest rate hampers the economy to achieve high growth. One of the solutions suggested by (Hamza and Saadaoui (2018) is using profit sharing investment to reduce the negative effect of the interest rate. This finding also confirms the result by Bacha (2008) that Islamic banking may also be subject to interest rates. Changes in interest rates seem still to have an impact on the country with a dual banking system. It is because there is often no Islamic finance equivalent to money market or government securities yield curves that can serve as references to price Islamic banking financing. As a result, some Islamic banks tend to rely on conventional interest rates to price their financing contracts (Bacha, 2008).

On the inflation variable testing, inflation rates do not have a significant impact on economic growth in the last ten years. Such a high estimated inflation rate would decrease the aggregate output because of the more attractiveness of domestic currency so that the investment activity will decline, which in turn drops the economic growth. This finding lacks consistency with the study by Law and Singh (2014) and Imam and Kpodar (2015) that the inflation rate is negatively associated with economic growth (Imam & Kpodar, 2015; Law & Singh, 2014). However, according to Barro (2013), only the high inflation rates that influence economic growth. The means of inflation rate in QISMUT plus Iran and Sudan is 8.7006%, which is classified as mild inflation. High inflation mostly occurred in Iran after the global crisis in 2008, while in Qatar experienced deflation throughout 2009 and 2010.

The overall findings generally confirm the previous study on the economy which reveals that the financial sector matters for growth (Beck et al., 2000; Levine, 1997; Rioja & Valev, 2004). In the monetary transmission mechanism (Mishkin, 2007), through the bank credit channel, increasing bank loans will cause the investment (and possibly consumer) spending rise. This channel also applies to Islamic banking sectors in QISMUT plus Iran and Sudan. The impact of Islamic banking financing on economic growth is in line with the result by Tohirin and Ismail, 2011, which is in the sense that Islamic bank mode of financing (*Mudaraba*, *Musharaka*, and *Murabaha*) might strengthen the bank-based view driving the economic growth. As the source of growth, Islamic banking played an essential role in supporting the economic growth indirectly and mediated through investment and consumption. Furthermore, economic



policies should recognize the finance-growth nexus through Islamic banking development to maintain sustainable development in the economy (Tohirin & Ismail, 2011).

## CONCLUSIONS

The study about the role of Islamic banking financing on economic growth is critical because this financial system is still in its preliminary phase in some countries. As financial sector has a significant impact on economic growth, it is important to investigate the Islamic banking role in the economy. The statistics and hypothesis testing show that firstly, Islamic banking financing has an impact on investment spending significantly. Secondly, the impact also occurs on consumption spending, and the effect is more significant on consumption spending rather than investment spending. However, from the direct impact analysis, it is found that Islamic banks are not able to impact the economic growth directly. Although it is not able to do so, due to small asset capitalization in mediation analysis, Islamic banking financing has a positive indirect effect on economic growth through investment and consumption. This affirms Keynesian theory stated that investment and consumption are the most excellent support on the growth of the economy.

From the control variable estimation, market share of Islamic bank assets has a significant effect on economic growth so that the more Islamic bank dominates the financial system, the better impact on economic growth. However, the negative sign of the dummy variable shows a lower effect on economic growth to the country with a full Islamic banking system. The other covariates testing shows the real interest rate which has a significant impact on economic growth. The exchange rate does not have any effect on economic growth because of the use of fixed rate against the US dollar. Meanwhile, inflation is categorized in mild inflation so that it could not influence economic growth significantly.

A policy on economy which improves the assets of Islamic banks in a positive way is one of the solutions to boost the role of Islamic banking in economy. It is a necessity that the development of Islamic banking financing focuses on profit-sharing based financing. For further research, this finding can be improved by doing an analysis of specifics investment and consumption spending financed by Islamic banking. Furthermore, a larger sample of Islamic banks, along with their system and an extended period of research, will lead to a more comprehensive analysis.



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