EFFECT OF ISLAMIC BANKING DEVELOPMENT ON ECONOMIC GROWTH – A case of the Kenyan Economy

Abdullahi Mohamed Hassan
School of Economics,
University of Nairobi, Kenya
Email: abdullahimoha88@gmail.com

Benedicto Onkoba Ongeri
School of Economics
University of Nairobi
Email: benedictongeri@yahoo.com/bongeri@uonbi.ac.ke

ABSTRACT
Islamic banking is growing fast in Kenya and is gradually gaining acceptance both locally and internationally. The inauguration of first fully-fledged Islamic banking in Kenya can be traced back in 2008 when it was initiated. The study investigated the effect of Islamic banking development on economic growth in Kenya using five Islamic banks in Kenya. To serve the purpose of the study, appropriate variables adopted which include Islamic banks’ financing funds given by Islamic banks to private sector through modes of financing as a proxy for the development of Islamic finance system, FDI and Trade as the independent variables while Real Gross Domestic Product (RGDP) was dependent variable measuring economic growth. This study carried out an ECM model for the purpose of analysis to achieving all the stated objectives. A cointegration test proved a cointegration between the dependent and independent variables with a positive and significant link between the Islamic Bank finance and the economic growth in Kenya. There was also a causal relationship between the economic growth and Islamic bank finance in Kenya from the Granger causality test. This study concluded by proposing appropriate policies to be taken to encourage Islamic bank finance because it spurs economic growth. This study employed secondary data extracted from Central Bank of Kenya (CBK), respective banks annual reports and Kenya National Bureau of Statistics for the period 2010-2017 was used.

Key Words: Real Gross Domestic Product, Islamic bank finance, Foreign Direct Investment and Trade
INTRODUCTION

Islamic banking and finance is one of the fastest growing economic segment globally. Therefore, it is important to investigate the significance of this banking model which is different in its adoption of perception of finance and the risks associated, based on the principle of Islamic sharia. Islamic banking grew considerably in the past few decades (Tabash and Dhankar, 2014). During the analysis of Islamic finance industry, Zubair (2014) noted that Islamic finance was expected to grow rapidly and its volume would be more than USD 2 trillion and Islamic banking reserves 78% while the rest comprises of; Sukuk 16%, Islamic financial reserve 4%, Takaful accounted for 1%, and Islamic Microfinance has 1% proportion of the Islamic Finance. According to him, Islamic finance industry witnessed a growth in double digits in the year 2014 which turned the USD 1.6 trillion Islamic finance industry in 2013 December to a tune of USD 2 trillion by the end of 2014. This would include Libya, Morocco, Mauritania, Senegal and Tunisia which are mainly North African countries. There Islamic finance has been increasing in Europe and UK and this was accompanied by a substantial increase in the share of international market of Sukuk (Zawya report, 2014).

Islamic bank provide a variety of products that is defined in Islamic shariah laws including: Musharakah (joint venture/partnership) and Mudarabah Trust-financing) which are dependent on profit and loss sharing principle and murabah (Cost-Plus), Ijara (leasing), Istisna (manufacturing financing) based on asset financing and other services like salam (advance payment), Qard Hassan (Welfare loan), Bai’ Muajjal (credit sale), Wadiah (safe keeping/Deposit funds), restricted and unrestricted accounts, syndication and other structures (Ahmed, 1994). Offering instruments suited to different socio-economic groups is the basic way in which Islamic finance enhances financial transactions related to real economy and supporting of financial inclusion. In addition to providing the normal retails needs of such as mortgages, financing of assets and real estates, motor vehicle financing, saving accounts and trade financing, it as well serves small and medium sized enterprises. It is based on partnership and cooperation sharing and this calls for a system which is equitable in participation as well as risk sharing. This ensures equality in the distribution of risk as well as the cooperation that exists between investors and entrepreneurs (Tabash and Dhankar, 2014).

Both Islamic banking and finance have an effect on financial transactions which is related to real economy and this prevents financing dealings which are societal. Does absence of interest motivates Islamic finance, which plays a key role in the banking and finance system? Islam does not allow interest known which in Islam is called riba divine orders and not legal obligation (Al-Qamar and Abdel-Haq, 1996). Apart from interest, other prohibition in Islamic banking and finance includes: uncertainty risk taking, ambiguity, and speculation in business transaction, derivatives, gambling, alcohol and investment in unethical and haram (illegal) business (Shepherd, 1996).

Banks may earn return from the funds invested as far as the bank and entrepreneurs share the risk and loss according to the principle of Loss and Profit and this depends on whether the project invested in fails. The two instruments in this principle applied by Islamic banks are; Mudarabah (trust-financing) and Musharakah (Joint Venture/Partnership) (Aggarwal and Yousef, 2000).
Saddiqi and Khan (1983, 1987) noted that Islamic finance is community based and good for entrepreneurs, focusing more on output and growth of economic production of goods and services. Consequently, the entire focus is changed from financial collateral or financial collaterals to focusing more on how trustworthy an entrepreneur is, viability of the project and its effectiveness.

IBF has grown in size wise and it still represents 1% of the total world asset (The Economist, 2014) and majority are found within the Middle East and Asian countries (Kammer et al, 2015). The Gulf Corporation Countries (GCC) regions makes the largest percentage of assets owned by Islamic banks as the sector is projected to gain mainstream relevance in most of its jurisdiction; the region accounts for 37.6% of the global Islamic financial assets. North and The Middle East which does not include GCC’s is close to second and has 34.4% share while Asia rank third representing 22.4% globally. The large share Islamic Finance in Malaysia of the Market place (Islamic Financial Service Industry Stability Report, 2015) with nearly 38 million customers globally (Ernest and Young, 2013). The contribution from other region, particularly Europe and Sub-Saharan Africa remain very low which raises issues of urgent attention especially in Kenya for instance with estimated population of 43 million out of which 11.2% are Muslims (world population prospect, 2015). The exclusion of large percentage of Muslim population from Islamic financial services, because they cannot operate the conventional system due to their religious belief, this has a run over effect on the growth of Kenya economy.

Kenya was the first nation in East and Central Africa to introduce Islamic banking. Therefore, the two pure Islamic banks; Gulf African Bank and First Community Bank after their inception in the year 2008 existed in Kenya with other conventional banks such as Barclays Bank, National Bank, Kenya Commercial Banks, and Standard Chartered and among others offering Islamic banking window. Islamic bank in Kenya account about 1% of all assets in the banking sector (CBK Report, 2014). The First Community Bank and Gulf African Bank fully fledged Islamic banking current operating in Kenya, have a joint gross asset of KES 16.54 billion, net financing and advance of 9.23 billion, deposit of 13.76 billion and the two banks have 61,101 deposits and 3,609 financing account (Laving, 2013).

**Islamic Banking in Sub-Saharan Africa**

Approximately half of the population in Sub-Saharan Africa were banking in the year 2014. In the same year 250,000000 were Muslims and the forecast indicated that they would reach 386,000000 in 2030 associated with increase in the in financial activities as a proportion of the GDP (Pew Research Centre Report, 2014). Young population together with the growing middle class provides an opportunity for the development of the Islamic finance to expand in the SSA. The need to improve the infrastructure an opportunity to grow the Islamic bonds to direct funds from Indonesia, Malaysia and Middle East e.g Shariah bond in Nigeria by the Osun State which could start a trend favorable to Sukuk while South Africa and Senegal issued their first Sukuk in 2014 (African development bank, 2014). Both Muslims and non-Muslims living in SSA are likely to find the Islam financial instruments favoring the SMEs and Micro-credits since it can help in developing them since there is less access to credit from conventional banks in Africa (El Galfy, 2012).
Countries in SSA that can potentially become hubs for Islamic finance activities include; Kenya, Mauritius, Nigeria and South Africa (Bloomberg, 2015). Despite the small proportion of Muslims (1.5%) in South Africa, the nation was first to position itself as the hub for the Shariah-compliant banks the South African region. In fact, Al Barka- which is part of Saudi in Dallah Al-Baraka group and Islamic bank were the first Islamic institution granted license by the Reserve Bank of South African in 1989 (Buksh, 2006).

Nigeria has the largest number of Muslims in SSA accounting for 49.3% of its total population of 182 million (pew survey, 2012) and yet the country Islamic banking is not yet developed. The first bank to open Islamic bank window in 1992 was Habib bank and now PHB (IMF working paper, 2014). There was the introduction of new laws to govern the activities of the Islamic banks by the Central Bank for Nigeria. There was also a setting up of the advisory council of expert for Islamic finance and the issuance of license to the first banks in the country which were full Islamic banks including Jaiz International Bank. Additionally, Diamond bank also started Islamic Window in 2012 (CBN, 2012).

Since 1998, Islamic banks have been operating in Mauritius when Muslim community in this Island started being served by Al-barakah cooperative society limited (Islamic Finance briefing, 2011). The country saw the amendment of the banking act in 2007 to permit the Islamic banking activities in 2008. This followed the launching of Islamic banking products by HSBC in 2009 and becoming the first conventional bank to offer the Islamic banking services in Mauritius (Bloomberg, 2009). The Bank of Mauritius was licensed to the full-fledged Islamic bank known as Century Banking Corporation.

**Islamic Banking in Kenya**

Islamic banking in Kenya has seen speedy intensification for the past decade. Currently, there are only two pure Islamic banking operating in Kenya; First Community Bank and Gulf African Bank and recently the Central Bank of Kenya have given license of operation to Dubai Islamic Banking (CBK, 2017). Conventional banks in Kenya also offer Islamic banking windows for instance Barclays Bank (La Riba), Kenya Commercial Bank (Sahl) National Bank (Ammanah) and Standard Chartered (Saadiq) (CBK, 2016).

The CBK made enquiries on the Islamic bank finance in 2000s following the development of the Islamic finance. In 2005, Barclays Bank of Kenya launched Sharia-compliant product called La-riba that was consistent with Islamic finance laws (CBK, 2006). The development and emergence of Islamic banking and finance has opened up an opportunity for Central Bank of Kenya to undertake a field research studies in other countries that practice Islamic finance system.

Commencement of Shariah-compliant investment in the country was occasioned by the change in section 45 of the CBK act (CBK, 2012). Several proposal were received by the CBK for the period 2006-2007 for the creation of fully-fledged shariah-compliant banks. Gulf Bank launched its operations in 2007 and this was accompanied significant investments from the Arab world. Further,
First Community Bank which was fully-fledged Islamic bank was licensed to operate in 2008 (CBK, 2015). The two Islamic banks offer shariah-compliant services and range of products that address the need of both Muslims and Non-Muslims, corporate companies and regulatory institutions.

In 2009, National Bank of Kenya started Islamic banking under “Al Mumin”window after the Central Bank of Kenya allowed it to offer two deposit-taking accounts. In 2013, the Central Bank authorized the bank to rebrand the “Almumin” to National Amaanah (CBK, 2013). In 2014, Standard chartered bank another conventional foreign bank in Kenya launched its Islamic banking window called “Saadiq” and it offers wide range of shariah-compliant products in the market (Nation Paper, 2014). In 2015, Kenya Commercial Bank (KCB) launch its Islamic banking window known as “Sahl banking” aimed at tapping into the demand created by Islamic financial growth. (CBK, 2015).

The two pure Islamic banks in Kenya which are mainly Gulf African Bank and First Community Bank accounted for 1.09% of the financial market share (CBK Supervision Annual Report, 2013) and they had a gross asset of KES 16.54 billion which was equivalent to US $185.98 million, net financing and advance of KES 9.23 billion (USD 104.67 million) and deposit of KES 13.76 billion. They have 61101 number of deposit accounts and 3,609 accounts for financing (laving, 2013). These two, accounts approximately 1% of Kenya’s banking asset (CBK, 2014).

The government amended the Capital Market Act to facilitate the development of shariah-compliant products after the approval of Finance Act 2017. The Income Tax Act has also been changed to allow for tax equivalence in shariah-compliant products just like the conventional financial products. Others include exemption from payment of Stamp Duty on transfer of title relating to sukuk (Islamic bond) plan to endorse Asset-Backed Securities transactions as well as the amendment to the Public Finance Management Act which was meant to allow the government to have investments in sukuk (The National Treasury budget report, 2017).

The National Treasury of Kenya kicked off plans to issue Islamic bond (sukuk) for the first time by an East African state through the finance bill of 2017 (The National Treasury, 2017). Proposed changes to several acts makes it easier for the treasury and counties to access Islamic financing and allow financial institutions deal in Islamic products. The government of Kenya came up various initiatives under its latest budget to improve Islamic finance and this was seen as part of effort which was meant to mobilize local funds as and make Nairobi as a regional hub for the sector (Kenya Economic Outlook Report 2017 by Deloitte). The changes through the amendment of the Public Finance Management Act saw the government of Kenya give out Islamic bonds (sukuk) to act as an alternative funding source. The move could spur Kenya’s ten-year old Islamic banking sector. This would help the government in funding infrastructure in Kenya in which account for about 11.2% of the population of approximately 43 million (Report by the National Treasury of Kenya, 2016/17).
Islamic Bank Finance and Economic growth
Kenya is taking advantage of this available huge investment by introducing new capital market regulation and amendment to section 45 of the banking act in order to accommodate Islamic finance investment. Islamic finance is building foundation in Kenya by attracting increasing number of investors from Asia and Middle East countries (Deloitte Report; Kenya Economic Outlook, 2017).

In the insurance sector, in 2011 the first insurance company operating under Islamic principles was given license in Kenya. Many takaful products are modified before being delivered to the poor into; small takaful short period of time, little premium and low cost payments methods to insure smooth cash flowing in and out the takaful fund. This concept of takaful Islamic compliant insurance stabilizes the economy by providing extensive support to the masses and therefore lead to GDP growth (Association of Kenya Insurers, 2016).

Kenya will develop Islamic finance through widespread review in taxation and creation of national sharia board and this could set Kenya at the front of other countries in Africa who need to grow the sector. Islamic finance has adherence to religious principles, however centralized approach is gaining tract to help standardize contracts and address consumer perception concerns. The Islamic Finance project management office (IFPMO) has a team of five government officials from capital market authority and the CBK is concerned with development of the industry sensitization and creation of human capital for this particular industry.

The Ministry of National Treasury and Central Bank of Kenya main aim is to create real opportunity to attract local and foreign investment and create inflows of capital in financial development that contribute to the Kenya’s economic GDP growth. IBF offers a variety of Islamic shariah-compliant products and service through its modes of Islamic banks’ financing methods of Musharakah (joint venture/partnership), Mudarabah (trust-financing), Murabahah (cost-plus), Ijara (leasing) and Istitina (manufacturing financing) that widens customer’s choice and preferences. Islamic finance basically enhances financial transactions that relate to real economy and is in support of financial inclusion by offering instruments which favour different socio-economic groups that promotes good living standard (Tabash and Dhankar, 2014).

Several foreign banks in Kenya such as Gulf African Bank, Barclays Bank, Standard Chartered have opened Islamic windows that creates shariah-compliant investment and promoting FDI which have positive impact on economic GDP growth. Trade financing is also the main products and service that Islamic bank offers to its customers. Trade financing mode of export and import business transaction has made capital available to manufacturers and producers. Islamic banks also offer Murabaha (cost-plus) method of trade financing by importing goods such as vehicles, machines and sell to customers through cost-plus arrangement and by repaying the money through instalments without interest. Ijara (leasing) is also trade financing method that Islamic banks creates for its customers by leasing for instance big machines and equipment (Iqbal 1999).
In conclusion, it can be noted that Islamic Banking finance enormously improves the Kenya’s economy through; investments, bonds, insurance etc. It is due to this that this study sought to carry out an empirical investigation on the relationship that exists between economic growth process and the sector development.

Available literature on Islamic banking in Kenya is limited and only few studies to some extent linked growth with Islamic banking system, among those for instance are Abubakar and Aduba (2017) on Islamic banking and investment financing in Kenya and Wahida (2015) on Islamic banking and economic development infrastructure in Kenya and this therefore create a vacuum in the literature. Divergent views in global studies and inadequate local studies to bridge this gap that this study wish to address. Therefore, this paper investigated the effect of Islamic banking development on economic growth performance in Kenya.

LITERATURE REVIEW

Theoretical Review

The initial writing on the Islamic banking theory and practice can be traced in 20th century (Saddiqi, 1981) On the other hand, the practice dates back in 1960s (Ahmad, 1995). The idea behind this theory of Islamic banking is that interest is not allowed in Islam and system of banking activity according to the Islamic law (Shariah) and this is guided by principles Islamic economics (Hassan and Lewis, 2007). According to Qureshi (1946) early contribution of Islamic banking theory was only part of the Islamic economic system which looks and looked at banking to be a social service. This implies that it should be publicly funded as any other public institutions such as health and education. The bank should not pay interest to any account holders or charge interest on loan given. The idea was that the possibility of Islamic bank and entrepreneurs forming a partnership.

Ahmed (1952) was for the idea of the establishment of Islamic bank based on what is defined as a joint stock company with limited liability. It proposed an increase into the number of current accounts and there was no payment of interest or dividends. The idea was account in which deposits of capital on in partnership and shareholders would receive higher dividend than the account holders from the profit made.

The study by Uzair (1955) led to the principle of Mudarabah (trust-financing) which formed the basis for interest-less banking. Similarly, Al-Arab (1966) established that Mudarabah was key in the banking system. Further, he introduced the idea of bank into two-tier Mudarabah in which the Islamic banks would mobilize Mudarabah as well as the allocation of the funds on Mudarabah basis. The implication here was that Islamic banks would act as managing trustee popularly known as Mudarib in the Islamic banking is concerned. Therefore, the Islamic banks would provide capital from deposits as well as of its shareholders. The amount of labour and capital with entrepreneurship take equal shares in the amount in the output (Irshad, 1964) and profit and losses are shared equally. This was the idea regarding Mudarabah which varied from the ordinary one. The implication was that the owner of capital and entrepreneur equally share profit or loss.
Siddiqi (1983) established a pioneering attempt providing clear working of the Islamic banking. This Islamic banking model was based on Mudarabah (Trust-financing) and Musharakah (Partnership financing). The model was based on two-tier Mudarabah financing-entrepreneurship relationship matters. According to him, the operations of Islamic bank are three-fold: commissions or other fixed charges, services on fees and financing on Mudarabah and Musharakah and services without charges. This implied that banks that don’t charge interests were appropriate compared to interest based conventional banks.

According to Profit and Loss Sharing theory, there should be equity in the sharing of losses and profit in the financial intermediation. Three parties are involved in the banking; bank which is the financial intermediary, depositors and entrepreneurs who are the actual users. (Iqbal and Mirakhor, 1987). According to this theory, there is the provision of the risk capital by the Islamic bank which is managed professionally and managers make strategic and operational decision, the bank share profits and loss. The theory is largely based on the Mudarabah (trust financing) and Musharakah (joint venture) of Islamic contracting.

Schumpeter (1911) was the first to write on the economic growth and how it was affected financial sector. The idea behind this theory is that financial deepening affects economic growth by allocating resources in an optimal manner (Hurlin & Venet, 2008). In fact the causality running from finance to economic growth and well-developed financial sector was found to be a pre-requisite to economic growth. A sound financial sector is associated with the reduced transaction costs and reduction of the problem of the information asymmetry (McKinnon & Shaw, 1973). Financial institutions lead to increase in the accumulation of capital and productivity of the factors of production which a crucial role in economic growth (King & Levine, 1993) and this was also agreed by Patrick (1966).

**Empirical Review on Islamic Bank Finance and Economic Growth**

Chapra (1985) noted that Islamic banking and finance system were meant to religiously acceptable studies service in finance which affect economic growth social economic justice employment issues, income distribution and wealth, strength of the currency, investment and mobilization of the resources of economic growth. (Iqbal (1991) found that s Islamic financial transaction depends on prohibition of interest Maysir (gambling and speculation in transaction) and gharar which is the uncertainty in business meant to ensure that investment are undertaken on the basis of halal which means allowed activities.

On the examination of Islamic bank finance, Kahf (2004) noted that Islamic banking also act as conventional banking but works on the basis of shariah called Fiqh al-Muamalat (Islamic rules on transaction). Primarily, Islamic banking gives financing in profit and loss but it does not allow riba. The profit sharing (Mudarabah) is what is used in Islamic banking, ensuring safety (Wadiah), joint venture, cost-plus (Murabaha) as well as leasing (ijara). Similarly, Abubakar and Aduba (2017) concludes that variety of Islamic banking products make are used in financing investment. This is because bank are involved in mortgage, asset servicing, real estates, trading and financing of SME.
Moreover, different modes of financing in Islamic banking are sharing of profit and loss methods and leasing of machines and equipment.

The study by Gerrald (1997) showed that Islamic religious believe and social responsibilities play a crucial role on the determination of bank selection. The third factor was Cost benefit which play an important role in the selection of banks. Customers for both Islamic and conventional banks have some objectives they share but they differ on other few as far as the bank selection is concerned. Investigation by Kinyanjui (2003) on the development and challenges facing Islamic banks in Kenya focusing on five banks offering Islamic bank services; First Community Banks, Gulf African Bank, Dubai Bank, Kenya Commercial Banks and Barclays Bank showed that Islamic banking compliance is driven two by religious compliance and the needs of the clients.

FDI is economically looked at as an investment by a company or individual in another country. This can be through the establishing of business operations, acquiring business assets (ownership) as well as controlling interests in a foreign company (Fu, 2000). The flow of FDI is associated with new technology, skills and know-how, international production, creation of employment opportunities, market expansion, managerial transfer etc. (Cave, 1996). The study also established that FDI positively affected economic growth in the receiving nation. Tajgardoon et al. (2012) in their study found that FDI and Islamic banking were related to each other. They took into account nine nations who were members of the Organization of Islamic Conference (OIC) and this was done within the time period from 1995 to 2010. The study findings indicated that FDI positively influences Islamic banking as well as economic growth. Study by Kalayei and Tekin (2016) examined interaction between FDI, Islamic banking and economic growth in Turkey using Turkish Central Bank data. The results of the study covering the period 2002-2014 established that there was a long term relationship between economic growth, FDI and participation funds in Islamic banking. Behname and Mostafari (2013) considering the FDI, economic growth and Islamic banking industry indicated that there was positive and significant effect on economic growth.

Lipsey (1998) found that members of Organization of Islamic Conference (OIC) experienced rapid growth in financial market and banking system and FDI inflow share in these countries has steadily augmented relative to the entire world. Countries including Malaysia, Turkey and Morocco were found to have a better positioned due to FDI advantage that developing countries have in attracting FDI.

According to Ocharo et al. (2014), there was unidirectional causality running from FDI to economic growth to cross-border interbank borrowing. The study investigated the effect of Islamic bank finance and flows of private capital on economic growth in Kenya. The study sought to find out there was a causality running from FDI to Portfolio investment and cross-border inter-bank borrowing on economic growth. Further, the study investigated the effect of FDI, investment portfolios and cross border inter-bank borrowings on economic growth in Kenya.
There exists a linkage between FDI, financial markets and market capitalization according to the study by Agallo (2012). The study results indicated that capital positively and significantly impacted GDP growth, however there was a positive significant impact of FDI on economic growth in Kenya. The empirical findings by Onuonga (2014) showed that there was long run relationship within the trade openness, economic development and financial development. Financial development was found to cause economic growth while growth leads to development in the financial sector. Tabash and Dhankar (2014) found a long run relationship in Islamic bank financing was positive and significantly related to economic growth that is caused by FDI, Trade financing and investment growth. The study mainly sought to establish the relationship between Islamic banking and FDI by its contribution to economic growth.

Lawal and Imam (2016) on Islamic banking and economic growth particularly in Nigeria. Using Islamic bank finance, FDI and trade to test their effect on GDP growth of Nigeria, the results of the study indicated strong positive relationship between economic growth and Islamic banking. The variables Islamic financing, FDI and trade significantly influence economic growth. In the same year, Bilal (2016) examined international trade under Islamic banking. In his studies, he used data for a period of 2000-2014 of Pakistan. He found out the working of financial instruments such as debt creating such as Murabah (cost-plus), Salam (advance payment) and Istisna (manufacturing financing) and non-debt creating such as Mudarabah (trust-financing) and Musharakah (joint venture/partnership) with their support in international trade.

Iqbal (1996) reported in his research studied trading activities on Islamic Shariah and its development under the umbrella of either interest-free transaction or Islamic banking system. Trade finance applies the principle of; sharing, sales and lease. Sharing modes of finance is of two types, equity-sharing fully and non-voting equity financing. While the taking the bird view, he noted that practice of certain kind of activities of the banks in the past 1200 years in the popular Islamic cities Baghdad, Damascus, Fez and Cordoba. The people of these cities are familiar with the use of Cheques and current account at that time. Mediterranean trade as well as Indians and Scandinavian traders through Arab Caravan are the main modes of financing.

Abubakar and Aduda (2016) they studied Islamic banking and investments financed focusing on Islamic banks in Kenya found that trade financing in Islamic banking on investment. Their result provided evidence of the Islamic banking products that Islamic banking used to finance their investment this includes; vehicles funding, mortgage financing, real estate, asset, trade and financing SME. The literature review has revealed knowledge gap on the effect of Islamic banking development on economic growth in Kenya. There exist few studies that are conducted in Kenya on Islamic banking and economic growth. Most studies that existed mainly focus on cross-border countries outside Kenya, that is; Middle East, South East Asia, North Africa and Nigeria. The existence of few studies in Kenya may be due to Islamic banking is only a decade years old, lack of government support and Islamic Banking Act.
RESEARCH METHODOLOGY

Theoretical Framework
From the literature review section, most of the research mainly focused on measuring the link between financial sector development and Economic growth. Among the pointers used includes lending and measurement of liquidity. The measurement of liquidity considers either M2 or M3. Following the reviewed literature, this paper adopted the neo-classical production function by Odedokun (1996) model to investigate the relationship that exists between the development of the Islamic Banking development and economic growth in Kenya. In this model which is a Solow-type growth model, development of the financial sector is just one of several inputs in the production function as specified in Equation (1).

\[ Y_t = f(L_t, K_t, F_t, Z_t) \] 3.1

Where, \( Y \) characterizes summative output or real GDP, \( L \) signifies labor, \( K \) shows the capital stock, \( F \) denotes another measure of the level FSD, \( Z \) signifies a vector of other factors such as exports denoted by \( X \) and investment level denoted by \( I \), that can be regarded as inputs in the total production process, and \( t \) represents a specific time period.

Upon transforming equation (1) above by differencing and rearranging, the resulting equation of the Odedokun process is specified as follows:

\[ \dot{Y}_t = \beta_0 + \beta_1 \dot{L}_t + \beta_2 \frac{1}{Y_t} + \beta_3 \dot{F}_t + \beta_4 \dot{X}_t + \epsilon_t \] 3.2

Where \((\cdot)\) which is the superscript characterizes the variable growth rate yearly. The model by Odedokun's shows two key things; the level and effects of development of the financial sector development on the economic performance and this is depicted by\( \beta_3 \). This particular measure of FSD yearly is helpful in the condensation of the level of Multicollinearity in the model. One foremost advantage of the theoretical model is that it allows for the expansion of how FSD is defined and this reduces the chance of neglecting variables of interest. On the other hand, the main weakness of this is that it assumes unidirectional causality from FSD and economic growth.

Empirical specification
Following the characteristics of the Banking sector discussed above, developing from equation 2 above, the following general equation is specified.

\[ Y_t = \alpha + \beta X_t + \gamma Z_t + \mu_t \] 3.3

Where, \( Y \) represents the real per capita GDP, \( X \) measures financial development, \( Z \) represents the controlling variables which have an interaction with GDP growth( Determinants of GDP growth) , \( \mu \) denotes the error term and \( t \) is a time subscript.
To measure the outcome of Islamic Banking Development on economic growth in Kenya, the study used the following indicators, first, it used Islamic -central bank ratio, which is given by the ratio of the banks domestic assets to total assets of bank and the federal bank. This includes mainly for the identified banks Islamic banks (Mudarabah, Musharakah, Murabaha, Ijarah and Istisna. It measures the point to which the banks allocate the humanity’s savings (Beck et al. (2000).

Secondly, capital outflow and GDP ratio, which is well-defined as the ratio the sum of outward foreign direct investment to GDP. Another variable is capital inflow and GDP ratio, which equals the addition of inward direct investment and portfolio venture liabilities to GDP. Net trade given by the difference between net exports and net imports is used. Growth rate in trade is used to represent the degree of openness of an economy. Finally, inflation rate is used as an indicator to quantify the macroeconomic stability (Beck et al, 2000).

With these variable, the model is specified as follows:

\[ \text{RGDP}_t = \beta_0 + \beta_1 \text{IBF}_t + \beta_2 \text{TRADE}_t + \beta_3 \text{INFR}_t + \beta_4 \text{IFDIR}_t + \epsilon_t \] ………………..3.4

Where, RGDP is the real GDP per capita, IBF is the ratio of the Islamic banks local assets to overall assets of bank and the federal bank, IFDIR is the ratio the summation of inward foreign direct investment and portfolio investment assets and GDP, TRADE is the difference between net exports and net imports, INFR is the change of Consumer Price Indices in Kenya is the time subscript for the variables and \( \epsilon \) is the error term.

Estimation techniques

It is a prominent problem in economics to have models where some variables in a model serve as the explanatory variables for certain dependent variables, but at the same time, they are explained by the dependent variables they are explaining (Asteriou & Hall, 2007). In such scenario, models of simultaneous equations have been developed because it is necessary to clarify the endogenous as well as the exogenous variables in the model. To address such a problem, Sims (1980) brought a different view indicating that, in cases of simultaneity among a numeral of variables, then these variables should be considered in the same way, that is, they should all be considered as endogenous variables. This development led to the introduction of the VAR models. Considering the nature of the variables in this study, which seem to depict such relationships, this study will It is provisional that before deciding on the kind of VAR model to estimate, statistical properties of the data should be determined. In this regard therefore, the following tests will be carried out.

Unit root test and Cointegration test

When the average, the variances and covariance of the series depicts no alteration over a given time, then the process referred to as stationary. For us to convert nonstationary series into a stationary one, then differencing has to be done. Upon differencing, a series which becomes stationary is said to be integrated of order one. The order of integration is decided by carrying out an augmented Dickey-Fuller test under a Null hypothesis of unit root presence.
From the previous section, upon determining that there is nonstationary, it is indispensable to determine the cointegration. As Engle and Granger (1987) argued out, it is potential that a linear combination of non-stationary series will be stationary. In such a case that a stationary combination does occur, then non-stationary time series is considered to be cointegrated. The study carried out a cointegration test using the Johansen test under the null hypothesis of no cointegration was carried out. Prior to this test, lag selection criterion was done. This was done using the Akaike Information Criterion, the Schwarz Bayesian information criterion. The model which minimized the AIC and SBC was chosen as the one with optimal lag length (Sims, 1993).

The study used secondary quarterly time series data for the period 2010-2017 due to the fact that data relating to Islamic banking in Kenya are limited taking into consideration when such system was adopted in 2008. This data will be extracted from the respective bank’s annual reports and Kenya National Bureau of Statistic. Additionally, data from the World Bank development indicators database was used.

RESULTS AND DISCUSSION

Descriptive Statistics and Normality test
The descriptive statistics for the variables considered in this to understand their statistical properties were presented. These included the means which indicated the average values of the variables considered. The variable with the highest means was the Islamic Bank finance with 1.78e+07. The Inflow FDI with 1.04e+07, followed by inflation with 7.635625 and Real GDP had 780698.1. Trade was the least with a negative mean of -74967.98. The Standard deviation is the indicates the amount by which the observations vary from the mean.

Islamic Bank Finance had the greatest Standard deviation with 7.043437 while inflation had the least value of Standard deviation of 3.931282. The Maximum indicate the highest value that can possibly be reached by the variables while the Minimum is the least value that can be attained. It is notable from the results that all the variables had positive values for both Minimum and Maximum except Trade which had both values being negative as per the output in Table 2.

Skewness is the measure of data if it is symmetrical or asymmetrical. Negative values of indicate that the data skewed to the left while positive values is an indication of rightward skewness. On the other hand Kurtosis measures peakedness. Positive values of Kurtosis implies that the data set distribution is steeper than the normal distribution with the same mean and Standard deviation. All the values of Kurtosis were found to be positive and hence the distribution of the dataset applied in this study was steeper than the normal distribution.

Using the Shapiro-Wilk test to find out the normality of the variables used in this study and the results are indicated. The results indicated that Trade, Inward FDI and Islamic Bank Finance were normally distributed. The rest including Real GDP and Inflation were found to be not normally distributed.
**Unit Root test and Cointegration test**

This study employed Augmented Dickey-Fuller test to test for Stationarity of the variables. All the variables were found to be non-stationary at level. All the variables in this study became stationary after the first difference apart from inflation which only became stationary after the second difference.

We employed Johansen test for cointegration and the rule in this test is that if the trace statistic is greater than the critical value then there is the rejection of the null hypothesis and this implied a long run relationship between the dependent and independent variables. The results indicated that at rank zero, the trace value was 133.0208 greater than the critical value which is 94.15 and hence rejected the null hypothesis of no cointegration. Therefore there was a long run relationship between the independent and dependent variables. The test further determined that the variables were cointegrated at order 3, that is, I (3). Since the variables were I (3), the appropriate model for estimation was Error Correction Model.

**Error Correction Model**

To find out if there existed a long run and short run relationship between economic growth and independent variables which included trade, inflation, FDI inflows and Islamic Bank finance, the study ran an ECM and the results presented in table 1. The study established that a significant long run relationship between economic growth and all the other independent variables. The coefficient of -0.661 implies that the rate of adjustment towards equilibrium is 66.1%. This can be interpreted to mean that there is a long-run relation relationship running from all the independent variables towards economic growth at a rate of 66.1. These findings are similar to the study by Furqani and Mulyany (2009) in their examination of the dynamic interaction between Islamic banking and economic growth of Malaysia using ECM. Islamic bank finance was found to be positively related to the economic growth. A unit increase in the level of Islamic bank finance would significantly cause economic growth by 2.275 in the first lag at 90% confidence level. These findings were same to that of Tabash and Dhankar (2014) who found that Islamic banks’ financing to be positive and significantly correlated with economic growth in Qatar.

Moreover, growth in trade was also found to be positively related to the economic growth in first and second lags. A unit increase in net traded which was measured as the difference between exports and imports was found to be significantly cause economic growth by 0.0000148 at 90% confidence level in the first lag and insignificantly cause economic growth by 0.00000729 in the second lag at 95% confidence level. Similarly, Jouin (2015) in his study on the relationship between international trade and economic growth and arrived to a conclusion that economic growth was directly and robustly related to trade openess for GCC countries.

Inflation was found to be affect economic growth in Kenya though positively and significantly. A unit increase in the rate of inflation in Kenya was found to increase economic growth by would significantly cause the economy to grow by 0.0596 at 99% confidence level at first lag. However, a unit increase in the rate of inflation would cause a decrease in economic growth rate by 0.0191
though not significantly in the second lag. Therefore, these findings suggest that high cost of living is associated with increase in the rate of economic growth. Inward flow of FDI was found to be positively related to economic growth in Kenya. A unit increase in the amount of FDI coming into the country was found to increase the rate of economic growth by 0.147 and 0.190 respectively at first and second lag respectively. However, this was not significant. This was contrary to the findings by Studies by Ocharo et al (2014) who whose findings provided evidence of a one way positive and significant causal relationship running from FDI to economic growth and from economic growth to cross-border interbank borrowing.

**TABLE 1: ECM RESULTS**

<table>
<thead>
<tr>
<th></th>
<th>VEC MODEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>D_RGDP</td>
<td></td>
</tr>
<tr>
<td>L._ce1</td>
<td>-0.661**</td>
</tr>
<tr>
<td></td>
<td>(0.226)</td>
</tr>
<tr>
<td>L._ce2</td>
<td>-2.185**</td>
</tr>
<tr>
<td></td>
<td>(0.680)</td>
</tr>
<tr>
<td>LD.RGDP</td>
<td>-0.328</td>
</tr>
<tr>
<td></td>
<td>(0.206)</td>
</tr>
<tr>
<td>L2D.RGDP</td>
<td>-0.0875</td>
</tr>
<tr>
<td></td>
<td>(0.161)</td>
</tr>
<tr>
<td>LD.IBF</td>
<td>2.275**</td>
</tr>
<tr>
<td></td>
<td>(0.791)</td>
</tr>
<tr>
<td>L2D.IBF</td>
<td>0.608</td>
</tr>
<tr>
<td></td>
<td>(0.418)</td>
</tr>
<tr>
<td>LD.IFDI</td>
<td>0.147</td>
</tr>
<tr>
<td></td>
<td>(0.715)</td>
</tr>
<tr>
<td>L2D.IFDI</td>
<td>0.190</td>
</tr>
<tr>
<td></td>
<td>(0.495)</td>
</tr>
<tr>
<td>LD.TRADE</td>
<td>0.0000148***</td>
</tr>
<tr>
<td></td>
<td>(0.00000372)</td>
</tr>
<tr>
<td>L2D.TRADE</td>
<td>0.00000729*</td>
</tr>
<tr>
<td></td>
<td>(0.00000331)</td>
</tr>
<tr>
<td>LD.INFLATION</td>
<td>0.0596***</td>
</tr>
<tr>
<td></td>
<td>(0.0174)</td>
</tr>
<tr>
<td>L2D.INFLATION</td>
<td>-0.0191</td>
</tr>
<tr>
<td></td>
<td>(0.0236)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.119</td>
</tr>
<tr>
<td></td>
<td>(2.538)</td>
</tr>
</tbody>
</table>

Standard errors in parentheses. *p< 0.05, **p< 0.1, ***p< 0.01

Source: Author Computation (2018)
**Granger Causality Results**

To establish the nature of the causal relationship among the variables, the study carried out a Granger Causality test. The results are tabulated in table 2.

<table>
<thead>
<tr>
<th>Equation</th>
<th>Excluded</th>
<th>Chi2</th>
<th>df</th>
<th>Prob&gt;chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>IBF</td>
<td>10.53</td>
<td>2</td>
<td>0.005</td>
</tr>
<tr>
<td>RGDP</td>
<td>IFDR</td>
<td>19.453</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>RGDP</td>
<td>TRADE</td>
<td>15.081</td>
<td>2</td>
<td>0.001</td>
</tr>
<tr>
<td>RGDP</td>
<td>INFLATION</td>
<td>39.75</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>RGDP</td>
<td>ALL</td>
<td>44.642</td>
<td>8</td>
<td>0.000</td>
</tr>
<tr>
<td>IBF</td>
<td>RGDP</td>
<td>1.5559</td>
<td>2</td>
<td>0.459</td>
</tr>
<tr>
<td>IBF</td>
<td>IFDR</td>
<td>.81302</td>
<td>2</td>
<td>0.666</td>
</tr>
<tr>
<td>IBF</td>
<td>TRADE</td>
<td>7.0275</td>
<td>2</td>
<td>0.030</td>
</tr>
<tr>
<td>IBF</td>
<td>INFLATION</td>
<td>.98811</td>
<td>2</td>
<td>0.610</td>
</tr>
<tr>
<td>IBF</td>
<td>ALL</td>
<td>17.653</td>
<td>8</td>
<td>0.024</td>
</tr>
</tbody>
</table>

**Source: Author Computation (2018)**

From table 2 above, the results indicated that there was a causality running from all the independent variables (IBF, IFDR, TRADE AND INFLATION) towards economic growth. The implication is that Islamic bank finance, FDI inflows, Trade and inflation cause economic growth and economic growth causes the said independent factors under study. On the other hand, the study established the absence of causality running from economic growth towards IBF. Furthermore, the study found out that there was a causality running from Trade towards IBF.

**CONCLUSION AND RECOMMENDATIONS**

**Conclusion**

This study sought to investigate the impact of Islamic banking development on economic growth in Kenya using quarterly time series data from 2010 to 2017. First, this study carried out a cointegration test to check for the existence of long run relationship between the economic growth and the independent variables which include Islamic banking finance, inflation, FDI inwards and net trade. The study results showed a long run relationship between economic growth in Kenya and the independent variables under the study. The first objective of this study was to find out whether there was significant relationship between Islamic bank finance and the economic growth in Kenya and the results pointed that there existed positive relationship between the Islamic bank finance and economic growth. Therefore, Islamic bank finance is key on economic growth in Kenya and therefore and important sector in economic performance.
Secondly, the study sought to find out the nature of causal relationship between Islamic bank finance and economic growth in Kenya. The study findings showed that there was a reverse causality running from Islamic bank finance to economic growth. The implication is that improvement in the Islamic bank finance in Kenya leads to increase in the rate of economic growth and the reverse is true that economic growth spur Islamic bank finance.

**Policy Recommendation**

The study finding shows that Islamic bank finance plays an important positive and significant role on economic growth in Kenya. Therefore this study proposes that the government should put appropriate measures aimed towards encouraging the growth of the Islamic bank finance to spur economic growth. Secondly, the study established that net trade was found to have a positive relationship with the economic growth in Kenya. This study, therefore proposes that the government should undertake appropriate trade policies aimed towards increasing the exports since this leads to improved economic performance.

Thirdly, this study proposes that the government should ensure that inflation is controlled so that welfare of the population is maintained as well as sustain economic growth in the country. This study was limited in the scope by the fact that data for the variables considered was not available in 1990s. Further, it is important to note that these findings could only be applicable in the Kenya context and at large the developing world and perhaps not in the first world countries. This study proposes further study to be carried out to be undertaken on growth Islamic bank finance and other sectors in the economy such as manufacturing and agricultural sectors.
REFERENCES


