JOURNAL OF GENERAL MANAGEMENT RESEARCH

Islamic Finance and Economic Growth in the Kingdom of Saudi Arabia (KSA)

An Empirical Evidence

Mosab I. Tabash and
Raj S. Dhankar[1]

Faculty of Management Studies (FMS)
University of Delhi, Delhi-110007, India
E-mail: mosubtab@gmail.com
[1]Faculty of Management Studies (FMS)
University of Delhi, Delhi-110007, India

ISSN 2348-2869 Print

Journal of General Management Research, Vol. 1, Issue 1, January 2014, pp. 37–50.

Abstract

This paper examines the relationship between the development of Islamic finance system and economic growth in the Kingdom of Saudi Arabia. The relationship between Islamic banking and economic growth is done using econometric analysis. In this analysis, we use Islamic banks' financing credited to private sector through modes of financing as a proxy for the development of Islamic finance system and Gross Domestic Product (GDP), Gross Fixed Capital Formation (GFCF) and Foreign Direct Investment inflow (FDI) as proxies for real economic growth. For the analysis, the unit root test, co-integration test and Granger causality tests were done. Based on the availability of data, time series data from 1990 to 2010 is used to examine the relationship between Islamic banks' financing and GDP, FDI, and GFCF. Data for all variables are stationary after first difference. The co-integration results provide an evidence of a unique cointegrating vector. In other words,

there is a long-term stable relationship between Islamic banks' financing and economic growth in the Kingdom of Saudi Arabia. That means Islamic banks' financing and economic growth relationships are moving together in the long-run.

The results from causality tests show that causality relation exist from the Islamic banks' financing to investment and Foreign Direct Investment (FDI) of the Kingdom of Saudi Arabia. The results indicate that Islamic finance is a suitable environment for attracting FDI and FDI reinforces economic growth.

Keywords: Islamic finance, Economic growth, Causality, KSA

INTRODUCTION

Islamic finance is based on ethical principles in line with Islamic religious law. Despite its low share of the global financial market, Islamic finance has been one of the fastest growing sectors over the last decades and has gained further momentum in the wake of the financial crisis. Recently, It had been reported that global Islamic banking assets are expected to cross the U.S $ 2 trillion mark in 2014 up from U.S $ 1.6 trillion in 2013 with more than 500 banks operating in over 75 countries of the world. According to Ernst & Young's in its World Islamic Banking Competitiveness Report 2013, the Islamic banking industry continues to record robust growth, with the top 20 Islamic banks registering a growth of 16 percent in the last three years. Today, Islamic finance is crossing the religious boundaries and has witnessed incredible growth, both in terms of assets and geographical spread. This is primarily because it is being seen as an ethical business model.

Islamic banks provide a variety of products, including Murabaha, Ijara, Mudaraba, Musharaka, Al Salam and Istitsna'a, restricted and unrestricted investment accounts, syndications and other structures. Islamic finance essentially promotes financial transactions with links to the real economy and abstains from financing activities that are detrimental to society. It supports financial inclusion by offering instruments suited to different socio-economic groups. Apart from Islamic banking that meets the normal retail needs of consumers (e.g. mortgage and automobile financing, savings accounts), it also serves small and medium-sized enterprises. Moreover, there are institutions that help improve the livelihoods of low-income groups by offering Shariah-compliant microfinance products based on profit-sharing techniques.

Islamic finance is ultimately founded on the principle of partnership and cooperation, which calls for a system of equity participation and risk-sharing. Such a system should promote equal distribution of risk and co-operation between the providers of funds (investors) and the users of funds (entrepreneurs). Islamic finance is community-oriented and entrepreneur-friendly, emphasizing productivity and the physical expansion of economic production and services. Hence, it shifts the overall focus from financial collateral or the financial worth of a borrower (the current predominant

practice) to the entrepreneur's trustworthiness and the project's viability and usefulness. This feature has important implications for the distribution of credit risk as well as systemic stability. Islamic finance, therefore, falls under ethical finance. Both are concerned with the impact of financial decisions on society and attract ethically-sensitive investors.

Banking sector constitutes a major financial service sector affecting economic development. The stability and growth of any economy to a great extent depends largely on the stability of its banking sector. It functions as intermediary linking surplus and deficit units; facilitate funds for productive purpose and thereby contributes to economic development. The 2008 financial crisis led to difficulties in many conventional banks across the globe. Islamic banks, in contrast, were largely insulated from the crisis. Their highly regulated operational environment guided by Shariah principles prohibited investment in the type of instruments which adversely affected conventional banks and which prompted the crisis. The impressive growth rate of Islamic finance and its stability during financial crisis attracts the attention of many policy makers and financial experts worldwide.

Despite the financial crisis which has plagued the economies of both industrialized and developing nations, the Islamic finance industry has been flourishing, and has enjoyed a 29 percent growth in assets to reach more than U.S.$ 600 billion in 2008 (Figure1).

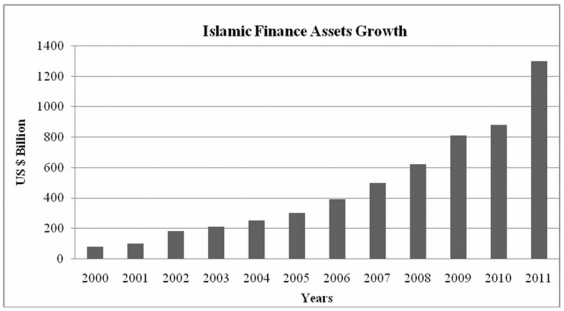

Figure 1: Islamic Finance Assets (2000-2011)

Despite there are many studies examining the relationship between conventional finance and economic growth, the studies that examine the relationship between Islamic finance and economic growth are not too many. So, in this study, the relationship between the development of Islamic finance system and growth of the economy in the kingdom of Saudi Arabia (KSA) will be tested to see whether Islamic finance contribute to economic growth or not.

The paper is organized as follows. Section one gives a general introduction about the current stage of Islamic finance. Section two presents the growth of Islamic finance in the Kingdom of Saudi Arabia (KSA). Section three includes the literature review on the relationship between Finance and economic growth, and in particularly Islamic finance and economic growth. Section four explains the research problem and objectives. Section five illustrates the methodology of the research. Section six explores the results and the analysis of the paper. Finally, section seven gives the conclusions of the paper.

ISLAMIC BANKING IN THE KINGDOM OF SAUDI ARABIA

Kingdom of Saudi Arabia (KSA) is one of only a few fast-growing countries in the world with a relatively high per capita income of $ 24,200 in 2010 (Economy report, 2010). Saudi Arabia's command economy is mainly petroleum-based. Saudi Arabia is the second largest Islamic finance economy globally with assets worth $ 270 billion. The Kingdom also has the largest Islamic banking market with total assets of $ 217 billion (Saudi gazette report, 2013). Saudi Arabia strictly adheres to Islamic laws; therefore Islamic banking is not only exceptionally popular within the society but also has benefited from the authorities' support since its inception. As a result, all Saudi banks have Shariah-compliant operations, either in the form of Islamic windows or as full-fledged Islamic banks. The Saudi Arabian banking sector, that combines full-fledged Islamic banks and institution running both Shariah-compliant and conventional operations, recorded an asset growth of 27.3% during the first nine months of 2008 to reach at U.S $ 338.6 billion over the same period a year earlier. Combined bank deposits and total credit also grew at a healthy pace, of 19.1% to U.S $ 214.4 billion and 36.1% to U.S $ 266.6 billion respectively. Combined assets of full-fledged Islamic banks (Al-Rajhi, Al-Jazira, Al-Bilad and Al Inma bank) registered a CAGR of 22% during the period from 2003 till 2007, and accounted for 16.2% of total bank assets during 2007 (Blominvest report, 2011).

Islamic banks posted strong results over the past few years in the Kingdom of Saudi Arabia (KSA). During the period from 1990 till 2010, combined assets of full-fledged Islamic banks in the kingdom of Saudi Arabia, generated an impressive growth from less than U.S. $ 4,941 million in 1990 to more than U.S $ 70,839 million in 2010 with a cumulative growth up to 93.02 percent as shown in fig. 2. The Saudi Arabian banking sector comprises 22 commercial banks, including 12 local banks and 10 branches of Gulf and foreign banks.

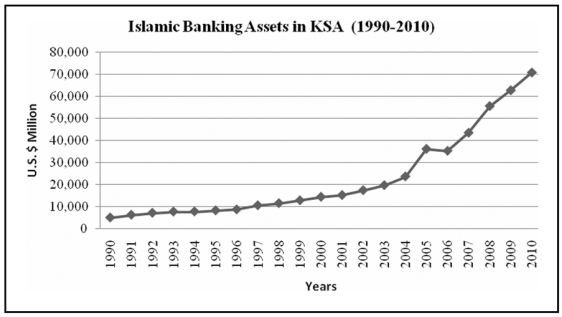

Figure 2: Islamic Banks' Assets in Kingdom of Saudi Arabia (1990-2010)

Out of the 12 local banks, four (Al-Rajhi, Al-Jazira, Al-Bilad and Al Inma Bank) are full-fledged Islamic banks. Al Rajhi is the third-largest Saudi bank, and the world's largest Islamic financial institution with total assets of U.S $ 33.3 billion recorded at the end of 2007. The Remaining Saudi banks run both conventional and Shariah-compliant operations.

Between 2003 and 2007, the assets of three full-fledged Islamic banks' grew by 22%, faster than 18.6% recorded by total banking

assets. Thus, the analyzed period turned out to be more beneficial for institutions focusing solely on Shariah-compliant operations than for those who tried to capture both Muslim and Non-Muslim markets. In 2006, the banking industry has experienced a slowdown as a result of the stock market crash in the country as shown in fig. 3.

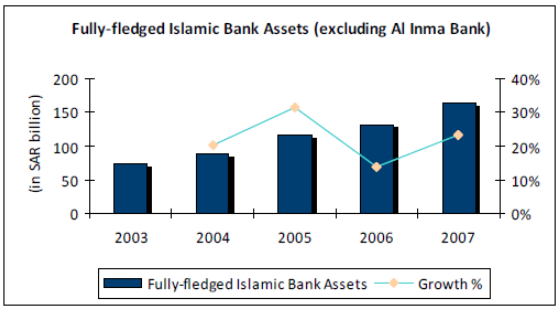

Figure 3: Total Islamic banking assets in Kingdom of Saudi Arabia with growth rate (2003-2007)

The Islamic banking industry's size can be easily quantified as most Saudi banks separate their Shariah-compliant credit facilities and deposits from the conventional credit facilities. The only bank that does apply such differentiation is the Arab National Bank. On the loans and deposits front, Islamic banking is growing faster than the total banking industry, reflecting the regional trend and its early stage of development. During 2007, Islamic banks financing and investment activities have increased by 24.1%; while deposits rose by 30.6%. On the other hand, the total banking industry's loans and deposits grew by 19.7% and 21.4%, respectively. Despite the healthy growth in total assets, loans and deposits, commercial banks registered a 12.7% drop in profits during 2007, on account of a plunge in brokerage and asset management fees (Blominvest report, 2011).

Total bank assets stood at 132.3% of GDP as compared to full-fledged Islamic bank assets penetration of 20.1% for 2007. Combined with the low penetration of the banking sector and expansion in overseas markets, Islamic banks in Saudi Arabia have a lot of growth potential. The Islamic banking sector can benefit from the expansion into the market without having to compete for the customers with the conventional service providers. The product portfolio in the industry includes Murabaha, Ijara, Istisna, and Mudaraba. During the period from 1990 till 2010, Islamic banks' financing of all full- fledged-Islamic banks of the Kingdom of Saudi Arabia generated an impressive growth. It is clear from the fig. (4) that the growth of Islamic banks' financing increased from less than U.S. $ 4,149 million in 1990, to more than, U.S $ 43,716 million in 2010 with a cumulative increase up to 90.51 %.

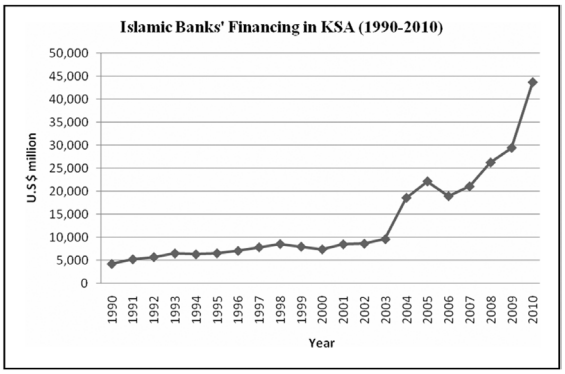

Figure 4: Islamic Banks financing (IBF) Growth in Kingdom of Saudi Arabia (1990-2010)

Kingdom of Saudi Arabia, the second biggest population among the group of analyzed

countries combined with low banking penetration and strong preference for Shariah-compliant services clearly presents an attractive growth opportunity for Islamic banks in the Middle East. The industry is further helped by huge investment projects, initiated mainly by the state but with spill over effects for the private sector, of which a large part is still underway despite the financial crisis. Key players in the industry are expanding their presence in Kuwait, Malaysia, and Asia.

LITERATURE REVIEW

Relationship between financial development and economic growth has been one of the most debated issues - whether the financial sector contributes to the real sector in the process of economic development or not. It is a controversial issue. Some authors consider finance an important element of growth (Schumpeter, 1934; Goldsmith, 1969; McKinnon, 1973, Shaw, 1973; King and Levine (1993), whilst for others it is only a minor growth factor (Robinson, 1952; Lucas, 1988). Schumpeter (1934) sees the banking sector as an engine of economic growth through its funding of productive investment. On the contrary, Lucas (1988) argues that the role of finance has been overstressed.

Patrick (1966) also contributed to this literature by identifying two possible patterns in the causal relationship between financial development and economic growth. The first one is called demand-following which means that the creation of modern financial institutions, their financial assets and liabilities, and related financial services is in response to the demand for these services by investors and savers in the real economy. This approach implies that financial system can support and sustain the leading sectors in the process of growth. Here, an expansion of the financial system is induced as a consequence of real economic growth. The second one is termed as supply-leading which means the creation of financial institutions and the supply of their financial assets, liabilities, and related financial services in advance of demand for them, especially the demand of entrepreneurs in the modern, growth-inducing sectors. Supply-leading has two functions: to transfer resources from traditional (non-growth) sectors to modern sectors, and to promote and stimulate an entrepreneurial response in these modern sectors. In addition, Gurley and Shaw (1955) and Goldsmith (1969) have argued that more developed financial markets promote economic growth by mobilizing savings and facilitating investment.

Odedokun (1998) in his study emphasized that even though financial intermediation promotes economic growth, the growth-promoting effects are more pronounced in the low-income countries. Using a cross-country data analysis of 71 less developed countries (LDCs) for the period 1960 to 1980, the study expanded the new-classical one-sector aggregate production function with financial development as an input. Two models were derived with economic growth as the dependent variable, while the regressors include; labour force growth, investment-GDP ratio, real export growth, and financial depth.

The models were estimated using the ordinary least squares (OLS) technique, as well as the Generalized Least Squares (GLS) technique. Besides, the strong positive relationship that manifested between financial intermediation and economic growth, the study established that the financial intermediation has a positive impact in economic growth and capital formation.

Masih (1996) supported demand-following hypothesis where economic growth causes financial sectors to develop. As per this view, the more rapid the growth of real national income, the greater will be the demand by enterprises for external funds (the saving of others), and therefore, financial intermediation, as in the most situations firms will be less able to finance expansion from internally generated depreciation allowance and retained profits. The financial system can thus support and sustain the leading sectors in the process of growth. In this case an expansion of the financial system is induced as a consequence of real economic growth or demand following.

Mishkin (2006) showed that indirect finance, which involves the activities of financial intermediaries, is many times more important than direct finance, in which businesses raise funds directly from lenders in financial markets, towards economic growth. For the period of 1970-1996, for example, sources of external funds of non-financial businesses in Japan were 85 percent from bank loans and 15 percent from financial markets while in Germany were almost 80 percent from bank loans and the rest from financial markets.

Romeo-Avila (2007) also confirmed the positive impact of finance on growth. He investigated the relationship between finance and growth, with emphasis on the effect of financial deregulation and banking law harmonization on economic growth in the European Union. The study establishes that financial intermediation impacts positively the economic growth through many channels. Kenourgios and Samitas (2007) examined the long-run relationship between finance and economic growth for Poland, and concluded that credit to the private sector has been one of the main driving forces of long-run growth. Huang et Lin (2009) re-examined the dynamic relationship between financial development and economic growth on the dataset used in Levine et al. (2000). Using a novel threshold regression with the instrumental variables approach, they support a positive linkage between financial development and economic growth, and found that financial development has an important effect on growth in low-income countries.

Gries, Kraft, and Meierrieks (2009) have tested for the causality between financial deepening, trade openness, and economic development. This study focuses on 16 Sub-Saharan African countries, using 20 annual time series observations. For the purpose of establishing the causal relationships, the Granger Angel method, the Vector Auto-Regression (VAR), and the Vector Error Correction Model (VECM) were used. This study shows support for the hypothesis of finance-led growth. It, however, suggests that the adoption of a more balanced policy approach may reduce

financial system deficiencies among the Sub-Saharan countries.

Some limited studies have discussed the relationship between Islamic finance and economic growth in some South-East Asia countries. Furqani and Mulyany (2009) examined the dynamic interactions between Islamic banking and economic growth of Malaysia by employing the co-integration test and Vector Error Correction Model (VECM) to see whether the financial system influences growth and growth transforms the operation of the financial system in the long-run. They used time series data of total Islamic bank financing (IBFinancing) and real GDP per capita (RGDP), fixed investment (GFCF), and trade activities (TRADE) to represent real economic sectors. They found that in the short-run, only fixed investment that granger cause Islamic bank to develop for 1997:1-2005:4. Whereas in the long-run, there is evidence of a bidirectional relationship between Islamic bank and fixed investment and there is evidence to support demand - following hypothesis of GDP and Islamic bank, where increase in GDP causes Islamic banking to develop and not vice-versa.

Abduh and Chowdhury (2012) investigated the long run and dynamic relationship between Islamic banking development and economic growth in the case of Bangladesh. The quarterly time-series data of economic growth, total financing and total deposit of Islamic banking from Q1:2004 to Q2:2011 are used in their study. Using co-integration and Granger's causality method, Islamic bank financing is found to have a positive and significant relationship with economic growth both in the long and short run. It implies that the development of Islamic banking is one of the policies, which should be considered by the government to improve their income.

Abduh and Omar (2012) have examined the short-run and the long-run relationships between Islamic banking development and economic growth in the case of Indonesia. They used quarterly data (2003:1-2010:2), and utilized the bound testing approach of cointegration and error correction models, developed within an autoregressive distributed lag (ARDL) framework. The results demonstrated a significant relationship in short-run and long-run periods between Islamic financial development and economic growth. The relationship, however, is neither Schumpeter's supply-leading nor Robinson's demand-following. It appears to be bi-directional relationship.

Tajgardoon and Noormohamadi (2012) have examined causality relationship between FDI and Islamic banking. Panel unit root tests show that the variables are stationary at level. Pedroni test indicates that there is not long-run relationship between FDI and Islamic banking. Nine countries from Organization Islamic Conference (OIC) over the period 1995-2010 have been chosen. The results show that there is a bidirectional relationship between Islamic banking and FDI. It means that FDI reinforces Islamic banking and Islamic banking attracts FDI. For FDI attraction, governments should devote attention on Islamic banking.

The previous studies have showed that the development of Islamic financial system played a major role in the economic growth for the country under consideration. But, the direction of the relationship between the flow of Islamic finance and economic growth differ from one country to another, depending upon the monetary policies of each country. There are some limitations of the previous studies like each study is applied for one country such as Malaysia, Indonesia, and Bangladesh… etc. Each study has used only one Islamic bank as a proxy for Islamic banks' financing. Most of the studies adopt direct method of relationship without involving other variables in the equations. Most of the studies use short time period. Most of the studies have investigated the relationship between Islamic finance and economic growth in the South-East Asia countries.

In order to remove the above limitations, this study investigates the total Islamic banks' financing for all full-fledged Islamic banks working in the Kingdom of Saudi Arabia in which Islamic financial system has a footprint for a reasonable time so that adequate number of data is available. Furthermore, more variables for economic growth are adopted in the equations that examine the relationship between Islamic finance and economic growth.

RESEARCH OBJECTIVES, IMPORTANCE AND QUESTIONS

There is no doubt that Islamic financial sector development plays an important role in the overall development of an economy. Although, there are many empirical studies that examined the relationship between finance and economic growth, but specific empirical studies on the relationship between Islamic finance and economic growth, are not too many. So, the main objective of this study is to examine empirically the relationship between Islamic finance and economic growth and its direction in the KSA.

The importance of this research emanates from the fact that it addresses an important sector in the Middle East economies, namely the Islamic finance industry. It touches everyone in the society, and has a great effect on any economy positively. Muslims represent about a quarter of the world's population, and there is greater awareness of and demand for Islamic-based financial products by Muslim and non-Muslim consumers as well. The Middle East countries continue to be the primary geographic center for Shariah-compliant financing. By some estimates, it accounts for two third of Islamic finance assets which reached more than 1.8 trillion dollar in 2013 and growing at the rate of 15 to 20 percent each year. Also, the findings of this study will be of interest to Western and Islamic finance practitioners, policy makers and academicians, who are interested in the stability of Islamic finance system.

The main research question of the paper is "**Does Islamic Finance contribute to growth of the economy of Kingdom of Saudi Arabia (KSA).** Further, the study attempts to give answer to the following sub-questions as under:

1. Does Islamic financial development have a significant relationship with economic growth in the long-term in the Kingdom of Saudi Arabia?
2. Does Islamic financial development lead to economic growth in the Kingdom of Saudi Arabia?
3. Does Economic Growth lead to Islamic financial development in the Kingdom of Saudi Arabia?

DATA AND VARIABLES

Data set is extracted from World Trade Organization (WTO), Global Development Finance and Islamic Banks and Financial Institutions Information (IBIS), database for all Islamic banks' financing in the Kingdom of Saudi Arabia. To serve our purpose, appropriate variables were established and the long-term relationships between those variables are determined by using econometric estimation methods. We use annually time series data for the variables- Islamic banks' financing through modes of financing as a proxy for financial sector and three variables representing real economic sectors namely Real Gross Domestic Product (GDP) and Gross Fixed Capital Formation (GFCF) and Foreign Direct Investment inflow (FDI) as proxies for economic growth. Based on the availability of data, time series data from 1990 to 2010 is used to examine the relationship between Islamic banks' financing and GDP, FDI, and GFCF.

The first step of the study is to determine the relationship between financial deepening and economic growth, and whether the series are stationary or not. In a model, for a correct evaluation, time series should be separated from all effects, and the series should be stationary. Thus, logarithms of time series were taken. Augmented Dickey Fuller (1981) and Phillips Perron (1988) tests are used. After that, Johansen co-integration test was used to examine the long-term relationship between financial deepening and economic growth. And then, the Granger causality test is used to test the causality between Islamic bank financing and economic growth. We use Eviews8 software to test and analyze the results.

RESULTS AND DISCUSSIONS

Descriptive Statistics

Table (1) presents summary statistics about the variables used in the econometric analysis for the Kingdom of Saudi Arabia. Figure 5, 6 and 7 show the relationship between Gross Domestic Product (GDP), Gross Fixed Capital Formation (GFCF), Foreign Direct Investment (FDI), and Islamic banks' financing in the Kingdom of Saudi Arabia graphically.

Table 1: Summary Statistics in KSA (U.S $ Million)

Statistics	*GDP*	*GFCF*	*FDI*	*IBF*
Mean	217891.9	46220.47	6723.806	13292.38
Median	174003.1	33266.90	264.6660	8432.000
Maximum	476304.8	92802.93	39466.86	43716.00
Minimum	116778.1	24833.69	-1881.070	4149.000
Std. Dev.	106616.0	24079.16	12770.89	10296.46
Observations	21	21	21	21

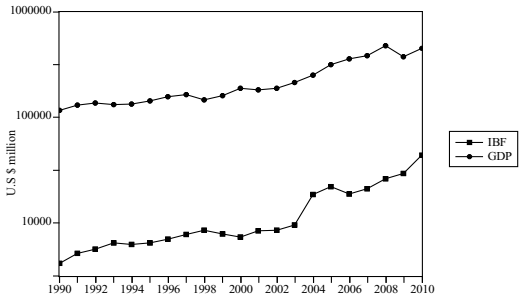

Figure 5: GDP and IBF Growth in KSA (1990-2010)

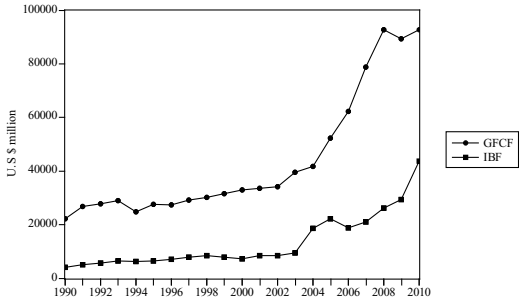

Figure 6: GFCF and IBF Growth in KSA (1990-2010)

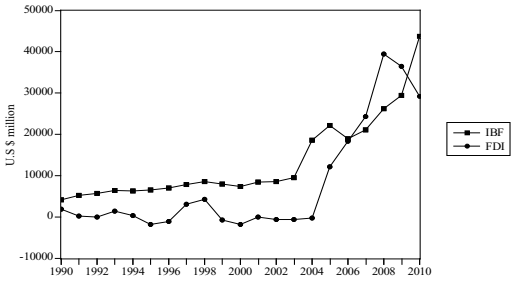

Figure 7: FDI and IBF Growth in KSA (1990-2010)

From table (1) and figures 5, 6, 7, we observe that the maximum value for IBFinancing in 2010 reached to (43716.00) from (4149.00) in 1990. This gives us an indication of high growth of the Islamic finance industry in the recent years. The statistics show that the median for GDP, GFCF, FDI, and IB Financing is less than the mean, which indicates that the values are positively skewed.

Unit Root Test

The results of the table (2) indicate that the data at the first difference is stationary at α 1%, 5%, and 10% level of significance respectively. For GDP variable, if p value is less than α, then Ho is rejected, and the series is stationary. The first row in table (2) shows that the p value (0.0033) is less than α (0.05) in ADF test.

Table 2: Unit Root Test

		ADF Test		*Phillip-Person Test*	
		Level 1	*First difference*	*Level 1*	*First difference*
Country	Variable	t- statistic P value	t- statistic P value	t- statistic P value	t- statistic P value
Kingdom of Saudi Arabia	GDP	-1.806662 0.6637	-6.107094 0.0033**	-1.730634 0.6992	-6.197181 0.0028**
	GFCF	-1.400999 0.8267	-3.666127 0.0622***	-1.411298 0.8234	-3.669996 0.0628***
	FDI	-2.643293 0.2671	-4.922412 0.0047**	-2.709708 0.2431	-3.669996 0.0628***
	IBFinancing	-1.119437 0.8998	-3.890363 0.0360**	-1.060304 0.9127	-6.426334 0.0018**
*,**,*** Significant at 1%,5%,10% level of significance					

Similarly, for GFCF, the result from the second row shows that the p value (0.0622) is less than α (0.1) and for FDI, the p value (0.0628) is less than α (0.1) in PP test and also, for IBFinancing, the p value (0.0360) is less than α (0.05) in ADF test. This suggests that the null hypothesis is rejected for all variables. Hence, the failure to reject the alternative hypothesis indicates that the series are stationary.

JOHANSEN CO-INTEGRATION TEST

Table (3) shows the results of Johansson test

for the long relationship between Islamic banks' financing and economic growth. The trace test rejects the null hypothesis, if the trace statistics exceeds the critical value. The first row of table 7.3 shows that the trace statistics (29.84013) exceeds the critical value of (15.41) at 95 percent confidence level for GDP and the trace statistics (21.97633) exceeds the critical value of (15.41) at 95 percent confidence level for GFCF.

Similarly, for FDI, the trace statistics (23.66818) exceeds the critical value of (15.41) at 95 percent confidence level. It suggests that the null hypothesis of no cointegrating relationships is rejected. The results confirm that there is a cointegrating relationship among the variables.

Table 3: Johansen's test (trace statistic)

	Trace statistics		*Critical values*	
			5%	*1%*
Gross Domestic Product(GDP)				
Null hypothesis	Ho: r = 0	29.84013**	15.41	20.04
Alternative hypothesis	H1:r ≥ 1	1.966164	3.76	6.65
Gross Fixed Capital Formation (GFCF)				
Null hypothesis	Ho: r = 0	21.97633**	15.41	20.04
Alternative hypothesis	H1:r ≥ 1	0.431163	3.76	6.65
Foreign Direct Investment (FDI)				
Null hypothesis	Ho: r = 0	23.66818**	15.41	20.04
Alternative hypothesis	H1:r ≥ 1	2.221237	3.76	6.65
** Significant at 5 % level				

Table (4) presents the results from the eigenvalue test. Similarly, the result from the first row of table (4) shows that the eigenvalue test statistics (27.87397) exceeds the critical value (14.07) at 95 percent confidence level for GDP and the eigenvalue test statistics (21.64418) exceeds the critical value of (14.07) at 95 percent confidence level for GFCF. Similarly, for FDI, the eigenvalue test statistics (21.33694) exceeds the critical value of (14.07) at 95 percent confidence level. This suggests that the null hypothesis is rejected. Hence, the failure to reject the alternative hypothesis indicates that there is a co-integrating relationship among the variables.

Table 4: Johansen's test
(Max-Eigenvalue statistic)

	Max-Eigenvalue		*Critical values*	
			5%	*1%*
Gross Domestic Product(GDP)				
Null hypothesis	Ho: r = 0	27.87397**	14.07	18.63
Alternative hypothesis	H1:r = 1	1.966164	3.76	6.65
Gross Fixed Capital Formation (GFCF)				
Null hypothesis	Ho: r = 0	21.64418**	14.07	18.63
Alternative hypothesis	H1:r ≥ 1	0.431163	3.76	6.65
Foreign Direct Investment (FDI)				
Null hypothesis	Ho: r = 0	21.33694**	14.07	18.63
Alternative hypothesis	H1:r ≥ 1	2.221237	3.76	6.65
** Significant at 5 % level				

The results from table (3) and (4), if read together, show that the null hypotheses of non-cointegation are rejected at 5 percent level of significance. This suggests that in the long- run Islamic banks' financing contributes in the growth of GDP and investment of the Kingdom of Saudi Arabia. It is clear from the table that there is a long-term relationship between Islamic banks' financing and foreign direct investment in Kingdom of Saudi Arabia.

Granger Causality Test

Statistics and probability values constructed under the null hypothesis of noncausality

are reported in table (5). It can be observed that there is a causal relationship between Islamic banks financing and GDP. However, our results show that one-way causality exists only from Islamic banks financing to GDP, since the probability value (0.00984) is less than (0.05). So, the null hypothesis is rejected, therefore, it can be concluded that the higher flow of Islamic finance has led to the growth of the economy. Furthermore, the results show there is a unidirectional causality between Islamic banks' financing and investment since it is significant at 10 percent level, as (0.09044) is less than (0.1). Thus, Islamic banks' financing granger causes the development of real economic growth in the Kingdom of Saudi Arabia (KSA). The causality between Islamic banks' financing and FDI is unidirectional. It means that Islamic banks' financing is attracting more investments into the country which in return leads to economic growth.

Table 5: Pair wise Granger Causality Tests

Null Hypothesis	*F statistics*	*Probability*
IBF does not Granger Cause GDP	100.928	0.00984**
GDP does not Granger Cause IBF	3.09196	0.26446
GFCF does not Granger Cause IBF	2.62966	0.10990
IBF does not Granger Cause GFCF	2.90760	0.09044***
IBF does not Granger Cause FDI	6.13869	0.04836**
FDI does not Granger Cause IBF	0.17426	0.96103
,* Significant at 5,10 % level of significance		

CONCLUSIONS

The results of this study show that there is a strong relationship between Islamic banking and economic growth in the Kingdom of Saudi Arabia using econometric analysis. Data for all variables are stationary after first difference. The co-integration results provide an evidence of a unique cointegrating vector. In other words, there is a long-term stable relationship between Islamic banks' financing and economic growth in the Kingdom of Saudi Arabia. That means Islamic banks' financing and economic growth relationships are moving together in the long-run.

It is proved that the Kingdom of Saudi Arabia has benefited from strong banking system. We also find that the causality relation exist in a unidirectional relationship from Islamic banks' financing to economic growth. Our results also indicate that improvement of the Islamic financial institutions in the Kingdom of Saudi Arabia will benefit from economic development, and it is important in the long run for the economic welfare, and also for poverty reduction. The results from causality tests show that causality relation exist from the Islamic banks' financing to investment and Foreign Direct Investment (FDI) of the Kingdom of Saudi Arabia. The results indicate that Islamic finance is a suitable environment for attracting FDI and FDI reinforces economic growth.

REFERENCES:

[1] Blominvest Bank (2011) 'Islamic banking in MENA region', Economic Research Department project, Feb. Available at: http://www.blominvestbank.com/Library/Files/Islamic%20Banking.pdf (accessed 19 Oct. 2013).

[2] Dickey, D. and Fuller, W. (1981), "Likelihood Ratio Statistics for Auto- regressive Time Series

with a Unit Root", Econometric journal Vol.49 (4), pp. 1057-1072.

[3] Economy report, 2010, http://en.wikipedia.org/wiki/Saudi_Arabia#Economy, "World Proved Reserves of Oil and Natural Gas, Most Recent Estimates". Eia.doe.gov. Retrieved 1 May 2012.

[4] Goldsmith, R. (1969), "Financial Structure and Economic Growth in Advanced Countries", National Bureau Committee for Economic Research, Capital Formation and Economic Growth, Princeton, University Press.

[5] Gries. T, Kraft. M, & Meierrieks. D (2009), Linkages between Financial Deepening, Trade Openness, and Economic Development: Causality Evidence from Sub-Saharan Africa, World Development, Vol. 37 (12), 1849-1860.

[6] Huang, H. and Shu-Chin, Lin. (2009),"Non-Linear Finance—Growth Nexus: A threshold with Instrumental Variable Approach", Economics of Transition, Vol. 17(3), pp. 439–466.

[7] Islamic banks and financial institutions database, can be reached through (http://www.ibisonline.net/IBISHomepage.aspx).

[8] Kenourgios, D. and Samitas, A. (2007), "Financial Development and Economic Growth in a Transition Economy: Evidence for Poland", Journal of Financial Decision Making, Vol.3 (1), pp. 35- 48.

[9] Levine, et al, (2000), "Finance and the Sources of Growth", Journal of Financial Economics, Vol. 58, pp.261–300.

[10] Levine, R. and king (1993), "Financial Development and Economic Growth: Views and Agenda", Journal of Economic Literature, Vol. 35(2), pp. 688-726.

[11] Lucas R.E., (1988),"On the Mechanics of Economic Development", Journal of Monetary Economics, Vol. 22(1), pp. 3-42.

[12] Masih,R.,andMasih,M.(1996),"Macroeconomic Activity Dynamics and Granger Causality: New Evidence from a Small Developing Economy Based on a Vector Error Correction Modelling Analysis", Economic Modelling journal, Vol.13, pp. 407-426.

[13] McKinnon R.I., (1973), "Money and Capital in Economic Development", the Brookings Institution, Washington, DC.

[14] Mishkin, F.S. (2006), the Economics of Money, Banking and Financial Markets, Pearson International Edition, Singapore.

[15] Muhamad Abduh, Mohd Azmi Omar, (2012),"Islamic banking and economic growth: the Indonesian experience", International Journal of Islamic and Middle Eastern Finance and Management, Vol. 5 Iss: 1 pp. 35 – 47.

[16] Muhamad Abduh1, and Nazreen T. Chowdhury (2012), Does Islamic Banking Matter for Economic Growth in Bangladesh? Extracted from www.ibtra.com/pdf /journal/v8_n3_article6.pdf Accessed on 2/11/2012.

[17] Odedokun, M. (1992),"Supply-Leading and Demand-Following Relationships between Economic Activity and Development Banking in Developing Countries: An Empirical Analysis", Singapore Economic Review, Vol. 37, pp. 46-58.

[18] Patrick, H.T. (1966), "Financial development and economic growth in developing countries", Economic Development and Cultural Change, Vol. 14 No. 2, pp. 174-89.

[19] Philips, P. (1988), "Time Series Regression with a Unit Root", Econometrical journal, Vol. 55, pp. 277-301.

[20] Robinson, J. (1952), "The Generalization of the General Theory in the Rate of Interest and Other Essays", London: Macmillan.

[21] Romeo, A. (2007), "Finance and Growth in the EU: New Evidence from the Harmonization of the Banking Industry", Journal of Banking and Finance, Vol. 31, pp.1937-1954.

[22] S.P. Parashar and J. Venkatesh (2010), How did Islamic banks do during global financial crisis, Banks and Bank Systems, 5(4), pp.54-62.

[23] Samad, A., and Hassan, M. K. (2000), "The Performance of Malaysian Islamic Bank During1984-1997: An Exploratory Study", International Journal of Islamic Financial Services, 1(3), pp. 6-14.

[24] Saudi gazette report, 2013," Saudi Arabia '2nd largest Islamic finance economy' can be reached through the website http://www.saudigazette.com.sa/index.cfm?method=home.regcon&contentid=20131126187776., accessed in Dec., 2013

[25] Schumpeter, J.A. (1934), the Theory of Economic Development", Cambridge, MA, Harvard University Press.

[26] Shaw, E.S. (1973), "Financial Deepening in Economic Development", Oxford University Press, New York.

[27] Tajgardoon and Noormohamadi (2012), Foreign Direct Investment and Islamic Banking: A Granger Causality Test, Economics and Finance Review Vol. 2(5) pp. 08 – 13.