# **Islamic Banking and Finance Review**



# Islamic Banking and Economic Growth: A Case of Pakistan

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## Islamic Banking and Economic Growth: A Case of Pakistan

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## Abstract

Islamic banking in Pakistan has gained recognition in last ten to eleven years. It offers many products which are different from conventional banking and the most significant constituent is zero interest. Currently, a chunk of people have motivation towards Islamic banking compared to conventional banking in view of its growth in terms of assets, investment and deposits. This growing number of Islamic banking institutes indicates an increased trend of Islamic banking in Pakistan. People's trust on the legitimacy of Islamic mode of banking motivates different conventional banks to open Islamic windows besides full-fledged Islamic branches to cater the increasing demand of people in Pakistan. The present study investigates short run and long run relationship between Islamic finance development, its various products and economic growth in Pakistan. Using quarterly data for the period of 2006-2013, the study applied bound cointegration test and error correction models (ECMs) developed within an autoregressive distributed lag (ARDL) structure. The study found that there is a supply side relation between economic growth and Islamic banking in Pakistan. The study also found that Islamic banking industry exerts significant impact on economic growth.

Keywords: economic growth, Islamic Banking, co-integration, ARDL, Pakistan

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#### Introduction

Islamic banking sector is a captivating sector for capital investment in many countries because of its interest free products. There are certain features of Islamic banking which gives a base for larger percentage of risk sharing, lesser dependency on loan instruments and restrict the gap between short term and long term financing. Even in the era of recession, Islamic banking industry has remained strong because of being asset based, also more capital investment is being observed in products by Islamic banks (Rogoff, 2011). Hence, various observers suggest that conventional banking has some prospects to learn from Islamic banking.

In last couple of years, Islamic banking has significantly grown by 16 percent of average annually and its asset base has been over Rs. 1 trillion till December 2014 as stated in Islamic Banking Bulletin of State Bank of Pakistan (2014). Islamic banking shares the deposits of 10.7 percent in the entire banking sector. Profitability of the Islamic banks has been registered at Rs 3.2 billion by the end of March 2014 (SBP, IBB, 2014). Consequently, the increasing number of banks and rise in investments and financing represent the importance of Islamic banking sector in Pakistan (Imam & Kangni, 2010).

Currently, people have motivations towards Islamic banking compared to conventional banking keeping in view the growth of its assets, investments and deposits (Hassan & Lewis, 2009). Table 1 shows the number of Islamic banks branches with each province market share (in percentage) for the Islamic banking sector. SBP report also indicates an increasing number of Islamic banking institutes in 2013-14 with an increase in the trend of Islamic banking in Pakistan.

Table 1

Province	<b>Total Number</b>	Share (Percent)
Punjab	574	43.7
Sindh	443	33.7
Khyber Pakhtunkhawa (KPK)	146	11.1
Baluchistan	55	4.2
Federally Administered Tribal	04	0.3
Areas (FATA)	04	
Federal Capital	72	5.5
Azaad Jammu Kashmir (AJK)	15	1.1
Gilgit Baltistan	05	0.4
Total	1,314	100

Province Wise Branch Network (March 2014)

Source: SBP, Islamic Banking Bulletin, 2014







Figure 1. Economic Growth and Islamic Net Financing

\* GDP growth and Islamic Net Financing (TNF) are in log and percentage

The exceptional increase in Islamic banks assets and deposits has made distinguished contributions in the financial sector and economic growth (Ali, Akhtar & Ahmed, 2011).

Diminishing Musharakahh has been the most flourishing product along with Ijarah. Though Ijarah lost its demand among investors as Murabah and Diminishing Musharkah gained the favors for investing and financing in the corporate sector with the passage of time. As it is shown in Figure 2 below



Figure 2: Islamic Banking Products (Trend Analysis)

## Source: SBP Islamic Banking Bulletin, 2014.

\* Murabah, Diminishing Musharakah and Ijarah are expressed in percentage

Although extensive research has been conducted in assessing the relation



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between the financial sector and economic growth (Shahbaz, Ahmad & Ali, 2008) but limited research could be found in the framework of Islamic banking sector. The present study is conducted to explore the causality among Islamic banks net financing, its products and economic growth for the period of 2006-2013. The research is distinctive in terms of exploring short run and long run relationship between Islamic finance development, its different products and economic growth particularly in Pakistan.

#### 1.1. Research Objectives

- The study addresses the following research objectives;
- To examine the impact of total net financing (TNF) of Islamic banks on economic growth of Pakistan.
- To examine the impact of gross fixed capital formation (GFCF) of Islamic banks on economic growth of Pakistan.
- To examine the impact of different Islamic banks products on economic growth of Pakistan.

This study is divided into five sections: Section I provides a brief overview of the study. In section II, literature review of previous studies has been examined and concluded to formulate the research hypothesis and to point out research gap in literature. Section III explains the methodology for conducting the research. It also gives a description of the econometric models and statistical tools for the analysis of the researched data. Section IV covers the results and findings of the study. Finally, section V concludes the key findings of the study.

## 2. Literature Review

The improvement in financial sector of an economy has various effects on its real output growth. This results in the increment in the investment capacity and savings volume of the economy (Goldsmith, 1969). During the 19<sup>th</sup> century, the importance of banking system has been argued relatively to the national income level and growth rate towards the economic development of a particular nation along with the productive investment paradigm (Shumpeter, 1934). Lately, this respective analysis has been further tested empirically with the intention of exploring particular indicators for describing causal relationship between financial and economic growth.

The emerging economies are thus taking into consideration the nexus of financial and economic growth perspective that has attained a global attention in present era. Although the financial sector has been developed and financial institutions are getting attention day by day, still there are divergent views concerning the role of financial mediators towards the persistent economic growth of a nation in long term scenarios. The financial sectors play central role in facilitating funds reallocation deposited by individual with excessive capital in order to obtain





investment opportunities. Those funds are then allocated to the corporate firms that are facing the shortage of resources. This infers two effects on financial development: First is the reduction in inclusive cost of capital with transaction cost of investment as well saving is reduced. Secondly, cost of cash flows would be reduced by financial sectors. This is because the adverse selection and the moral hazard problems faced by the firms are overcome with the support of financial markets and respective financial institutions (Rajan & Zingales, 1998).

King and Levine (1993) conducted a study to explore the causality relationship between the financial development and economic growth variables. By following the post hoc and ergo propter hoc technique they found that economic growth can be predicted up to next 10 to 30 years by the predetermined elements of the development of financial sector. However, correlation observed in the study data cannot be found invalid, but still these results were not able to test the uncertainties about causality relationship. It has been observed that financial sector mediators are one of the causes of rapid growth of economy for developing Asian frugal. Therefore, banks are preferred over security markets by these frugal for the purpose of financial intermediation (Bosworth, 1998).

Garson (1998) examined and depicted financial mediators as the main locomotives for economic growth. This is because the money is able to circulate in the economy due to the functioning of these intermediaries, as they actively seek deposits by the individuals and these mobilized funds are then lent to the parties in need of credits. These credits are however, regarded as growth engines but not the inputs. It has also been posit by few researchers that economic growth and development of finance has a bidirectional relationship. Financial improvements are the cause of economic growth in emerging frugal while growth is the cause of financial improvement in established frugal (Levine, Loayza & Beck, 1999).

Levine, Loayza & Beck (2000) again conducted a research to assess the following dimensions; (a) Does the Economic growth tend to be influenced by the external constituents of financial mediator development in the financial sector? (b) Does the differences in the level of development of financial sector explain legal as well as accounting structures across the countries, such as, rights given to the creditors, enforcement of the contract and standards & canons of accounting? The study used cross-sectional traditional techniques that contain instrumental variable data and also the recent procedures of dynamic panel data. The findings documented positive association between external constituents related to financial mediator development and economic growth. Further, the second notion supported that development level differences of financial sector were explained by legal and accounting structures across the countries. Collectively, these results proposed that accounting and legal restructuring tend to accelerate financial development and eventually economic growth.



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The Islamic banking theory is centered on the notion of interest free banking, since interest is forbidden in Islam. Islam has given principles related to the banking structure and functioning. The core norm of the banking system, based on Islamic teachings follows the trade and profit stratagem though interest remains forbidden (Farahani and Hossein, 2012). In today's era, the mounting progress of Islamic banking has improved itself proved ahead the conventional banking system and an effective alternative to the conventional banking. In Muslim as well non-Muslim countries, this promising banking system has been rapidly emerging since last two decades. It has now been operating in more than 60 countries across the world and has logged extreme growth rates. Therefore, bankers and practitioners tend to predict that 50% of Islamic countries' savings will be controlled by Islamic banks in coming decades (Muhammad et al., 2012).

Islamic system of financing is based on the products offered by Islamic banks. Many researchers have discussed the products of Islamic banks (Ringim, 2013). Ayadi et al. (2015) also discoursed the products offered by Islamic banks and related them to the theory of financial intermediation. Subjective evidence of study demonstrated less difference than expected between Islamic and conventional banks. This was due to the evidence which displayed conventional products could be conscripted as products based on *Shariah* teachings. The researchers found new noteworthy differences when conventional banks were compared with Islamic ones while controlling country and other banks attributes. These differences were in the form of orientation of business, its quality of assets, competence and appropriateness. However, there have been evidences greater than capitalization of Islamic system of banking, thus during financial crisis Islamic banking system has relatively better performance explained by the capital cushion and greater reserves of liquidity (Khattak, 2010).

The role of development of Islamic system financing towards economic growth is acknowledged by limited literature available in this arena. Scharf (1983) stated that Islamic banking system had a noteworthy contribution towards growth and development of economy particularly when there is recession, decline or lower growth. This is because the operations of Islamic banks are concerned with productive investment. Also, the banking system operating on *Shariah* rules are feasible, profitable and practical compared to conventional banking system.

In Malaysia, Islamic banking sector has resulted in positive change in the financial performance of the economy. By the end of 2005, Islamic banking assets contributed 60.2% in total financing and ultimately impacting economic growth (Furqani & Mulyani, 2009). Furqani and Mulyani (2009) elaborated that all banks should adopt the rules and regulations presented by Islamic banking system to restore their client's confidence especially after the global financial crises.





Goaied & Saifallah (2010) applied GMM estimation technique for dynamic panel data of 16 frugal in MENA region. The study results found non-significant association between growth and Islamic banking system, thus ultimately strengthening the concept of nil contribution of banks in economic growth. Further, the results revealed negative relation of bank indicators with growth factor under certain stipulations. It was also notified that Islamic banks were not exceptional in financial markets and were weakly correlated to economic growth but somehow these banks act positively when demonstrated theoretically.

Abduh and Omar (2012) targeted Indonesian economy for the causality relationship of growth dynamic and development of Islamic financial sector. Bound testing cointegration approach and error correlation models (ECM) were used to measure the association among growth dynamic and Islamic financial sector development. The study outcomes confirmed significant association in short term and long run between growth and Islamic finance development dynamics. However, the relationship was not unidirectional as stated by Schumpeter based on supply-leading and Robinson based on demand-following theory. These findings were similar to the research work of Abduh and Chowdhury (2012). They focused on Bangladesh economy to test the association between growth dynamic and total financing as well as deposit structure of banking sector operating in Islamic setups. Time series quarterly data covering time span from Q1:2004 up till Q2:2011 was used in the research. The outcomes of the research study revealed positive association in long run and also the direction was appeared to be bidirectional.

## 3. Methodology and Data Description

The objective of the study is to examine the impact of net financing of Islamic banks, gross fixed capital formation and Islamic banking products on economic growth. The data for GDP and GFCF is taken from World Economic Indicators. For Islamic net financing and Islamic banking products data is taken from State Bank of Pakistan from the time period of 2006 to 2013 on quarterly basis. Granger causality test is used to analyze the causality and to explore the long and short run effects. This study will use Autoregressive Distributed Lag (ARDL) modeling approach put forward by Pesaran, Shin and Smith (2001).

## **3.1 Research Model**

The graphical, symbolic or verbal representation of a phenomenon or relationship between the two or more variables is called research model or equation. The following research model is proposed for the study

 $G = f (NF, IBP_1, IBP_2, IBP_3, GFCF)$  (A)

Long run Equation:



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 $G = \alpha_0 + \alpha 1NF + \alpha 2IBP1 + \alpha 3IBP2 + \alpha 4IBP3 + \alpha 5GFCF + \notin (B)$ Short run Equation:

 $\Delta G = \theta_o + \theta 1 \Delta NF + \theta 2 \Delta IBP1 + \theta 3 \Delta IBP2 + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 5 \Delta GFCF + \delta 1 (G_{-1} + \alpha 1NF_{-1}) + \theta 4 \Delta IBP3 + \theta 4 \Delta IB$  $_{1}+\alpha 2IBP1_{-1} + \alpha 3IBP2_{-1} + \alpha 4IBP3_{-1} + \alpha 5GFCF_{-1}) + e$  (C)

Where,

G = GDP constant (lcu) in terms of log,

= Net financing and investment of Islamic banks in Pakistan in terms of log, NF

IBP 1 = Murabah as percentage share of investment by Islamic banks

IBP 2 = Diminishing Musharakah as % age share of investment by Islamic banks

IBP 3 = Ijarah as percentage share of investment by Islamic banks

FCF = Gross fixed capital formation as a percentage of GDP.

## 4. Results and Discussion

#### 4.1 Unit Root Test

In this section, unit root test using Augmented Dickey Fuller (ADF) and Philips Peron (PP) tests are applied to see the nature of the series under consideration for the study. It was observed that all of the variables were I(0) or I(1), as shown in Table 2.

	Augmente	d Dickey Ful	ler Test	Phili	ps Peron Te	st	
Variable		Intercept			Intercept		
v ar lable	Intercept	& Trend	Result	Intercept	& Trend	Result	
**Growth	1.745 (0.99)	0.087 (0.995)	I(1)	-1.49 (0.5200)	-3.28 (0.0904)	I(0)	
ΔGrowth	-6.905 (0.00)	-4.44 (0.011)	I(0)	-6.12 (0.00)	6.67 (0.00)	I(1)	
GFCF	-0.469 (0.882)	-2.525 (0.314)	I(1)	-0.629 (0.848)	-1.723 (0.713)	I(0)	
ΔGFCF	-2.63 (0.099)	-2.57 (0.295)	I(1)	-2.62 (0.1007)	-2.558 (0.3002)	I(1)	
**Net fin	-2.197 (0.2114)	-1.58 (0.774)	I(1)	-2.141 (0.230)	-1.711 (0.720)	I(0)	
$\Delta Net fin$	-4.195 (0.002)	-4.72 (0.004)	I(0)	-4.25 (0.0025)	-4.75 (0.0037)	I(1)	
*Diminishing Musharakah	-3.05 (0.041)	-2.67 (0.25)	I(0)	-3.461 (0.0167)	-2.165 (0.276)	I(0)	
∆Diminishing Musharakah	-5.49 (0.0001)	-6.12 (0.0001)	I(1)	-5.497 (0.0001)	-6.191 (0.0001)	I(1)	

Table 2 Unit Poot Tasts





*Murabah	-1.41	-1.74	I(0)	-3.689	-3.927	I(0)
	(0.56)	(0.705)	. /	(0.0098)	(0.0236)	
Murabah	-10.037	-10.135	$\mathbf{I}(1)$	-10.201	-10.27	<b>I</b> (1)
	(0.000)	(0.000)	1(1)	(0.0001)	(0.0002)	1(1)
*Lough	-1.629	-3.76	<b>I</b> (0)	-0.521	-4.017	<b>I</b> (0)
Tjaran	(0.454)	(0.033)	1(0)	(0.8730)	(0.0194)	1(0)
$\Delta$ Ijarah	-8.13	-8.052	<b>I</b> (1)	-10.8705	-28.6313	<b>I</b> (1)
	(0.000)	(0.000)	1(1)	(0.000)	(0.000)	1(1)

\* Murabah, Diminishing Musharakah and Ijarah are in percentage

\*\*GDP and Islamic net financing are in log form

\*\*\* Lag values are based on SIC; Probabilities are in parenthesis ()

## 4.2. Test for Co-integration

Co-integration test is used to measure the existence of long run association among the variables in the present study. The F - statistics is computed for this reason and if the calculated value of F - statistic in the model (C) is greater than the upper critical bound, it means there exists a long run association between the variables at the 5% level of significance.

The hypotheses for co-integration test are:

H <sub>0</sub> :	$\alpha_1 = \alpha_2 = \alpha_3 = \alpha_4 = \alpha_5$	: No long run relationship exists
H <sub>1</sub> :	$\alpha_1 \neq \alpha_2 \neq \alpha_3 \neq \alpha_4 \neq \alpha_5$	: Long run relationship exists

Table 3

Long I	Run	Cointegratio	n (	Causa	lity)	Test
--------	-----	--------------	-----	-------	-------	------

	Value	Df	Probability
F-Statistic	3.85303	(6,13)	0.0198
Critical	(2.45, 3.61) fo	or I(0) and I(1	) variables at 5%
value	(2.12, 3.23) fe	or I(0) and I(1	)Variables at 10%

Table 3 shows the existence of long run association among the operating variables as the calculated F – statistic value is greater than the upper critical bound (3.8 > 3.61) and (3.8 > 3.23) at the 5 % level of significance, respectively. Therefore, it is concluded on the basis of above table that there exists a co-integrating relationship in the present study for the period of 2006 – 2013; hence confirming existence of long run relationship between gross fixed capital formation (GFCF), Islamic banking total net financing (TNF) in Pakistan.



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## 4.3. Long Run Coefficients

Table 4 indicates that Murabah, diminishing Musharakah, Ijarah and Islamic net financing (TNF) are significant at 0.01 level of significance. In the long run, Murabah and diminishing Musharakah are not affecting on growth positively. TNF and economic growth are positively related and significant at the 0.01 level of significance. The similar results were found by Abduh and Omar (2012) in Indonesia and Farahani and Sadr (2012) for Indonesian and Iran economy. Murabaha and Diminishing Musharakah remained the most focused modes as these modes aggregately contributed almost 63 percent of general financing (SBP, Islamic Banking bulletin, 2014). Nonetheless, regardless of seeing increment in total sum, Murabaha and diminishing Musharakah financing declined amid the quarter finishing December 2014 in Pakistan. This was chiefly because of moderately higher development in financing modes like Musharakah, Salam and Istisna bringing about an increase in their shares in general financing amid the quarters under audit. These results represent the actual growth relations that may contribute more if investment mode of financing is expanded with corporate sector in Pakistan rather than diminishing Musharakah and Murabah.

#### Table 4

Growth	Coefficient	Std Error	r <b>T - stat</b>	Prob.
GFCF	-0.0030	0.0030	-0.948	0.3530
TNF	0.0150	0.0030	4.310**	0.000
Murabah	-0.0005	0.0002	-2.132*	0.0444
Diminishing Musharakah	-0.0006	0.0002	-2.309*	0.030′
Ijarah	0.0009	0.0002	2.968**	0.001′
Intercept	-0.4542	0.1250	-3.6066	0.001(
R-squared = 0.69	F - stat = 10.007		Prob (F-stat) =	0.000042

\* Significant at 5% \*\* Significant at 1%

#### 4.4. Short Run Coefficients

In short run, only last year's net financing growth and Ijarah are significant. All other variables are insignificant at 0.01 level of significance. This shows economic growth variable is significant due to the forward linkages of economic activities with the previous year. The variable Ijarah is also participatory in trade and investment and therefore stimulates growth in short run also.

Error term with lagged parameter (ECM) is an adaptive parameter measuring the short term spreading from long term equilibrium. In short run, the variables may disperse from one another which cause the given structure in equilibrium. Hence, the statistical significance of the coefficient associated with the ECT provides us the



verification of an EC mechanism that derives the variables back to their long term relationship.

Table 5				
Determining Short Run Coeff	icient			
GROWTH	Coefficient	<b>Std Error</b>	T - stat	Prob.
$\Delta$ Growth(-1)	0.1700	0.188	0.902	0.3785
$\Delta  \mathrm{GFCF}$	-0.0108	0.005	-2.1343	0.0468
$\Delta$ Net Investment and financing	0.0048	0.006	0.7339	0.4724
$\Delta$ Murabah	-1.76E-05	0.0003	.067921	0.9466
$\Delta$ Diminishing Musharakah	2.48E-05	0.0002	059477	0.9532
$\Delta$ Ijarah	0.00094	0.0003	2.8827	0.0099
Intercept	-1.13E-05	0.00078	01443	0.9886
ECM (-1)	-0.907	0.257	-3.527	.0024
R-squared = 0.62	F-stat = 4	4.30252	Prob(F · 0.0	- stat) = 005
Table 5.1				
Determining Short Run Coefficient				

White TEST : Hetroskedasticity		Breusch-Godfrey LM Autocorrelation			
Obs*R-squared	Prob. Chi-squared	Lag	Obs*R-squared	Prob. Ch-Square	
5.15914	0.2328	1	5.048231	0.0801	
* CUSUM and CUS	UM So charts also confir	m the st	ability of coefficients		

# 4.5. CUSUM Test for Stability

The Figure 3 shows that CUSUM test value is stable as the regressed line is within the range. This shows that mean of error term is constant for the Model A.



Figure3. CUSUM Test for Stability



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The Figure 4 shows that CUSUM test value is stable as the regressed line is within the range. This shows that variance of error term is constant for the Model A.



Figure4. CUSUM of Squares Test for Stability

#### 4.6. Causality Tests

In order to examine causal relationship between economic growth, GFCF and net financing of Islamic banks, we applied pair wise granger causality test (Table 6).

Table 6

Ganger Causality Test

Null Hypothesi	<b>F-Stats</b>	Probability
GFCF does not Granger Cause GROWTH	4.5798	0.0427
IJA does not Granger Cause GROWTH	8.6230	0.0072
MUR does not Granger Cause GROWTH	0.8430	0.3676
MUS does not Granger Cause GROWTH	7.1796	0.0131
NETFIN does not Granger Cause GROWTH	12.393	0.0017

The short run causality tested through pair wise granger causality in Table 6 shows that the Islamic net financing and investment, GFCF, Diminishing Musharakah and Ijarah granger cause growth. It was found that Murabah does not granger cause growth.

## 5. Conclusion and Recommendations

## 5.1. Conclusion

The study was conducted to find out the impact of net financing of Islamic banks, gross fixed capital formation and Islamic banking products on economic growth for the time period of 2006 to 2013. The findings of the study conclude that there is a long run cointegration among the variables of Model A. This study finds



evidence that in the long-run, Islamic financial investment is positively and significantly correlated with economic growth and capital accumulation, similar to the findings of Abduh andOmar (2012) and Farahani and Sadr (2012). In the analysis of Islamic banking products, the economic growth is positively stimulated by Ijarah. Murabah and diminishing Musharakah and found to be negatively related with economic growth. Ijarah is found to be the only Islamic banking product significant both in short run and long run.

The study also finds Islamic banking net financing, GFCF, diminishing Musharakah and Ijarah cause economic growth in case of Pakistan. Similar causal effect was also explored by Abduh and Omar (2012) for Indonesian economy. The study represents a participatory role of Islamic banking towards the economic growth. It has shown the potential of boosting economic growth even with a small percentage in the banking industry.

## 5.2. Recommendations

Islamic banking is more impactful to the economy. As a corollary to this, the government first needs to encourage and promote establishment of more Islamic commercial banks, Islamic windows, and Islamic rural banks whilst at the same time encourage existing Islamic banks to establish more branches. Secondly as the number of Islamic banks and Islamic financial institutions has increased there is also a need to have sufficient skilled manpower to manage these institutions. There is a need to re-look at the current regulations and guidelines in order to bring it at par with the development of Islamic banking worldwide. For example, the judiciary must have a dedicated unit to handle Islamic banking legal cases that whether those cases should go to the court for adjudication or not. Finally, as the relationship is found to be supply side, Islamic banking may not be able to contribute fully to economic growth if there is low expansion in Islamic banking sector.

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