



# Impact of Islamic Investment Trend on Economic Growth-A Case Study of Pakistan

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## Abstract

*For the last more than a decade, Islamic Banking System has been a centre of point in research area. Even in Pakistan, since 2002 onwards there has been a continuous growth found in the field of Islamic Banking System. This research was conducted to examine the impact of Islamic Investment Trend that has been present in Pakistan for more than a decade, on economic growth of Pakistan. For this purpose, the sample size of 200 observations based on quarterly data for the period of 2002 to 2012 has been selected. The data was collected from State Bank of Pakistan, Islamic Banking Bulletin and Economic Survey of Pakistan. The study was investigated on the basis of four predictors: Deposit of Islamic Bank (main variable), Inflation Rate, Interest Rate and Foreign Direct Investment (control variable) and Dependent Variable: Advances of Scheduled Banks by applying Auto Regressive Distributed Lag Model. The result revealed that Deposits of Islamic Banks at 4 different lags significantly play role in predicting the Economic Growth. Furthermore, results can be more significant if other modes of Islamic finance are also taken into consideration for the relevant research. Future research can be conducted by involving other factors effecting economic growth of a country i.e. Political Instability, Cost of Inputs for production, Foreign Trade Policy, Human Resource Development and Productivity, Unemployment and Government Expenditure with longer time period and larger sample size.*

**Keywords:** Economic growth, foreign direct investment (FDI), inflation (INF), interest rate (INT), deposits of islamic banks (DIB), auto regressive distributed lag model (ARDL).

## Introduction

Theory and empirical studies show that there are certain factors that determine the economic growth of a country. Such factors are Interest Rate, Political Stability, Cost of Inputs for production, Foreign Direct Investment, General Price Level, Foreign Trade Policy, Human Resource Development and Productivity, Unemployment and Government Expenditure.

Theoretically the output of goods and services of any country depends upon the quantities of inputs available and its productivity, such as quantity of capital and labor as well as their productivity (Abel, Bernanke and Croushore)<sup>1</sup>. The relationship of output with inputs is described by the production function in the following way:  $Y = AF(K, N)$

Where: 'Y' denotes total output. 'A' denotes productivity. 'K' denotes economy's use of capital. 'N' denotes total labor used

Therefore rate of output growth can be illustrated as follows:

$$\frac{\Delta Y}{Y} = \frac{\Delta A}{A} + a_K \frac{\Delta K}{K} + a_N \frac{\Delta N}{N}$$

Where:  $\frac{\Delta Y}{Y}$  = represents output growth rate,  $\frac{\Delta A}{A}$  = represents productivity growth rate,  $\frac{\Delta K}{K}$  = represents capital growth rate,  $\frac{\Delta N}{N}$  = represents labor growth rate,  $a_K$  = represents elasticity of output with respect to capital,  $a_N$  = represents elasticity of output with respect to labor

As far as the elasticities of output with respect to capital and labor are concerned, they are explained as percentage increase in output in response to 1% increase in capital stock and 1% increase in labor used respectively.

The above mentioned equation is known as Growth Accounting Equation. It is in fact the equation that represents production function written in growth rate form.

Since it is well known to everyone that economic growth is very important for a better living standard, therefore, it is considered as a central objective of economic policies. Economists who have thoroughly studied the features of economic growth and its sources, have in fact found that the engine of economic growth must ride on four wheels of economic growth<sup>2</sup>. These four wheels of economic growth are:

i. Human Resources in the form of labor supply, education, discipline, motivation. ii. Natural Resources in the form of land, minerals, fuels, environmental quality. iii. Capital Formation in the form of machines, factories, roads. iv. Technology in the form of science, engineering, management, entrepreneurship

Therefore, on the basis of above factors mentioned, the new equation for economic growth can be expressed as:

$$Q = AF(K, L, R)$$

Where: Q = output, K = productive services of capital, L = labor inputs, R = natural-resource inputs, A = level of technology in the economy, F = production function

Whether we discuss about human resources, natural resources, technology or capital, we do require investment to be made in these areas to bring them up to the level of expectation as required for the desired economic growth. Therefore, the role of financial institution is vital in this regards. All financial institutions, and above all the central bank of a country, play very important role to overheat the economic activities in any economy and to keep a faster pace of economic growth.

In developing nations, average income of an individual is very low that leads to a low level of savings and investments in the country. Financial institutions, in this respect, can play an important role by introducing different modes of savings and investments.

**Problem Statement:** During the last couple of decades, Islamic financial system has been the centre of discussion. In many countries like Australia, Malaysia, Indonesia, Iran and Pakistan etc. Islamic banking system has flourished within a very short time of 10 to 15 years. Although Economic Growth of a country, specially developing country like Pakistan, depends on many factors such as Interest Rate, Political Stability, Cost of Inputs for production, Foreign Direct Investment, General Price Level, Foreign Trade Policy, Human Resource Development and Productivity, Unemployment and Government Expenditure but Islamic banking system has also been given much consideration as one of the determinants of economic growth. Several researches have proved that Islamic financial and banking system in different countries have shown or are expected to show positive impact on economic growth. Therefore, this research intends to evaluate the existence of Islamic banking system in Pakistan and its impact on economic growth.

**Literature Review:** Empirically, financial institutions are regulated through monetary policy that may have great impact on the real economy by using several channels such as interest rate, credit, asset price and exchange rate etc<sup>3</sup>.

In many countries, relatively, there has been a recent rapid development in the financial sector in the form of Islamic banking and finance industry. Lending, borrowing and

investment functions are facilitated (in Islamic financial system) on a risk-sharing basis rather than on interest-based lending (in conventional banking system). The most important feature of Islamic financial system is that it ensures the optimal rate of capital formulation as well as the efficient utilization of it towards the achievement of sustainable economic growth<sup>4</sup>.

**Growth of Islamic Banking System:** If we go in details, the Islamic banking and finance discipline is around forty years old. By 2003, there were 176 Islamic banks around the world in different Asian and European countries with their total assets of approximately \$147 billion. If we take a look on South Asian countries, Islamic banking, in Pakistan, has been growing recently at a faster pace under the dual banking system. It is also being followed more rigorously in Bangladesh under the increasing market and public demands. At present, we find six fully dedicated Islamic banks with more than 100 branches which run their affairs throughout the major cities of Pakistan. Other than these, there are nine conventional banks that have 62 fully committed Islamic banking branches across the country<sup>5</sup>.

Research has also shown a strong relationship between Islamic finance and microfinancing. Islamic banks use different modes of Islamic finance for promoting microfinance. i.e. *mudaraba*, *murahaba* and *musharaka*. Another research proves that microfinance institutions have been successful in providing loans to those farmers and entrepreneurs who are poor and do not have financial or tangible assets as security and financin<sup>6</sup>. Through another research it is also concluded that whether it is microfinance institutions or Islamic banks both bring micro-credit to the poor by approaching them and by making it possible to enable them not to fully participate in local economic activities but also profitably. In this way local economic activities may expand further and would benefit the community at micro level and the country at macro level<sup>7</sup>.

Another research found that in Bangladesh, micro financing really helped poor borrowers to reduce poverty not only to the level of themselves but upto the level of entire village<sup>8</sup>. Therefore, the growth at such level, up to some extent, contributes a lot to the entire economy and may accelerate the economic growth in an obvious way.

Micro financing through Islamic banking can be a relevant consent of poverty reduction. Unlike Conventional banking system where a poor investor has to follow many formalities that deteriorates their interest in further investment, Islamic banking system is a definite mode which is expected to facilitate such people in a way as per the teachings of Islam where circulation of wealth does not remain in the hands of few people who are in power but it keeps changing hands without dividing the society into different classes of income<sup>9</sup>.

During the last decade, it is observed that there has been strong and fast growth in Islamic finance and banking throughout the world. It is found through research that investment behavior of a

Muslim is influenced by Islam and its modes of finance. However, it depends upon the religiosity of an individual up to which the investment is influenced<sup>10</sup>.

A research conducted on Australian economy reveals that even though the Islamic financial institutions being operated are very small in number in terms of their size, assets, profitability and number of investors, their continuous growth shows a positive trend. This trend may lead to a major contribution towards the economic growth of Australia in future<sup>11</sup>. Research also finds that the market for Islamic Banking is expected to grow at 13 to 16 percent a year during the period of next eight to ten years.

**Corruption and Economic Growth:** With reference to economic growth of a country, there are some other factors that significantly influence the growth level. Among those the corruption also influences the economic growth inversely. But it is also very much true that no economy is free of corruption, it may vary from nation to nation and their standard of living. Empirically through studies it has been found that corruption has negative impact on economic growth while rule of law, democratic accountability and bureaucratic quality may influence economic growth positively<sup>12</sup>.

**Fiscal Policy and Economic Growth:** It is believed that taxation, public investment and other aspects of fiscal policy can cause economic growth to accelerate at a faster pace. Similarly, it also effects the private investment (one of the major contributor towards economic growth) through the regulation of taxation policy. Practically it is also observed that although a country practised expansionary fiscal policy but could not achieve the desired economic growth rate. This may be caused by either distortionary or non-distortionary taxation or productive and unproductive expenditures which, sometimes, bring undesirable results<sup>13</sup>.

**Income Inequality and Economic Growth:** As far as the income inequality is concerned, research finds that income inequality, as measured by Gini Index hinders economic growth. Hence, a society where there is relatively high income inequality found, such population may face relatively high crime, more undereducated citizen, social unrest, less consumption spending, political instability and other socioeconomic problems which may cause economic growth to be deteriorated<sup>14</sup>. Another research came up with a view point that less government spending on education, infrastructure and Research and Development causes economic growth to slow down. Hence, Efficiency and Equity has been a debatable area caused by the rising income inequality<sup>15</sup>.

**Financial Development and Economic Growth:** Financial development in a country plays an important role in order to accelerate economic growth. This shows that there are higher chances of resulting volume of output found in the economy because of the availability of higher amount of real money balances, *ceteris paribus*. Hence, theories show financial

development and economic growth have positive relationship between them<sup>16</sup>.

Considering the scenario of developing nations, small and cottage industries have very important role in contributes towards the economic growth of a country. Small industries create jobs for skilled people living in rural areas who may exploit their expertise, and thus, can play a vital role towards the contribution in economic growth of their country<sup>17</sup>.

**Worldwide Crisis and Islamic Financial System:** Worldwide economic crisis that occurred in 2007 have shifted the interests of researcher towards the Islamic financial system (IFS) as an alternative to conventional system. The only reason for the attraction towards this area of research is that Islamic financial system is an asset-based system where there is no concept of interest. Although both Islamic and Conventional financial systems are vulnerable to financial shocks as well as macroeconomic crisis, but even then, it is believed that Islamic financial system can tune the economy relatively well due to its interest-free based financial system (Kassim and Majid)<sup>18</sup>. In 1999 Kuala Lumpur Shari'ah Index was also introduced just to bring Muslim population in confidence and to create an environment where Muslims' investment needs can be fulfilled. It is also found through research that during bearish economic trends Islamic funds were found to perform better than the conventional funds, whereas, during bullish economic conditions conventional funds were found to show better performance<sup>19</sup>.

**Islamic Banking System as a backbone of Islamic Financial System:** Since Islamic banking system is considered as a backbone of the Islamic financial system, it plays an important role in economic growth of a country through mobilizing deposits and providing financing to accelerate economic activities. A variety of Islamic financial products and services in Malaysia is being offered by Islamic Banking Institutions which ultimately contribute towards increase in GDP, and hence, have multiplier effect on economic growth. It is because of such financial products and services with attractive and innovative features which are available at competitive prices as compare to conventional products and services, that both Muslim and non-Muslim population in Malaysia admire it, causing Islamic banking system to be reflected as an effective means of financial intermediation<sup>20</sup>. Research has also found that in the long-run, Islamic financial development is positively and significantly correlated with economic growth and capital accumulation. Hence, it is also concluded that domestic financing provided by Islamic banking sector must have contributed a lot towards the economic growth of Indonesia<sup>21</sup>.

**Conventional versus Islamic Banking System:** According to conventional banking system, it does not fulfill the basic requirements for the establishment of an Islamic economy. Therefore, there is no practice of small and startup business to be encouraged practically, spread capital ownership to

encourage people to trade instead of doing job, no concern to have social justice, or encouragement of sharing and participation based economic activities, but the only Riba/interest through which people, towns, companies, cities and economies are wrecked, causing the whole world to be pushed to environmental disaster. Whereas, as per Islamic rules of financing, since interest is not necessary, interest free loans allow capital projects to be constructed at a low cost and it cannot be inflationary. As the loan must be repaid, it is ensured at the time of repayment for cancellation of money that there is no chance of inflation to exist against interest free loan because a productive asset was created against it and the money which was borrowed to bring asset into existence is eliminated by paying off. Binary Islamic endogenous loans lead to economic and social welfare of the people through justice in a way that for the public capital projects like roads, bridges, hospitals, schools, fire stations, sewage etc., Islamic banks may lend interest-free money to the government to meet government expenditure requirements. Such loans (interest-free loans) have been used in past for public capital projects in countries like Channel Island of Guernsey, Canada, USA and New Zealand<sup>22</sup>.

**FDI and Economic Growth:** Research finds that FDI plays an important in industrial growth of a country. FDI in Automobile industry of India has brought steady positive growth along with purchasing power capacity and auto-finance facility<sup>23</sup>. The research implies that steady growth in one sector of the economy may help to increase pace of economic growth in India. Another research comes up with positive results in terms of FDI as one of the determinants of economic growth of a country. It is concluded in the research that strategically FDI as one of the core components of investment is of high demand for a sustained economic growth of India. It may, later, lead to economic development through jobs creation, expansion in industrial sector, health and education as well as research and development<sup>24</sup>.

**Hypothesis:** H<sub>1</sub>: There is a significant and positive impact of Islamic Investment Trend on economic growth of Pakistan.

## Research Methodology

The purpose of this research is to analyze the impact of Islamic investment trend on economic growth. For this study, DEPOSITS of Islamic Banks (DIB) has been taken as one of the independent variables to represent Islamic Investment Trend in Pakistan. Since Economic Growth is measured through GDP, Advances of Scheduled Banks (ADV) is used as a proxy for Economic Growth and to authenticate the significance for using ADV as a proxy for Economic Growth, a correlation test is run between GDP and ADV. For analysis, quarterly time series data of Advances of Scheduled Banks (ADV), Deposits of Islamic Banks (DIB), Inflation (INF), Interest Rate (INT) and Foreign Direct Investment (FDI) has been taken from March 2002 till December 2012 through available sources of State Bank of

Pakistan, Federal Bureau of Statistics, Quarterly Financial Reports of Islamic Bulletin in Pakistan and Annual Reports of United Nations.

Once on the basis of correlation, it is decided to use ADV as a proxy of Economic Growth, to determine the impact of DIB, INF, INT and FDI on ADV., Regression Analysis has been used as one of the statistical tools. Regression Analysis facilitates the research to predict Economic Growth based on INF, INT, FDI and specifically DIB. This research deals with time series data related to dependent and independent variables. Therefore, in order to check stationarity in data, Unit Root Test (Augmented Dicky Fuller) was applied. Unit Root Test determines the levels of stationarity in data. Auto Regressive Distributed Lag Model is used for time series data in which independent variables with current values and lagged values has impact on dependent variable current value and lagged values. To determine the overall strength of the Regression Model, Adjusted R Square has been taken as a base of whether to declare Regression Model as a strong model.

## Results and Discussions

With the application of stated statistical techniques, results were determined for Correlation between GDP and ADVANCES, Unit Root Test, Adjusted R-Square, and finally, beta coefficients of Auto Regressive Distributed Lag Model. Successfully, all tests were found significant except some of the control variables which were found insignificant and results derived from those tests fulfill the objectives of research. Details of results and their interpretation are given in the following paragraphs:

**Table-1**  
**Correlations**

		GDP	Advances
GDP	Pearson Correlation	1	0.961**
	Sig. (2-tailed)		0.000
	N	34	34
ADVANCES	Pearson Correlation	0.961**	1
	Sig. (2-tailed)	0.000	
	N	34	43

\*\*, Correlation is significant at the 0.01 level (2-tailed).

The results shown in table-1 depicts that GDP is significantly correlated with ADVANCES as sig. value is less than 0.01 i.e. 0.000. The correlation value 0.961 also indicates that the two variables are highly and positively correlated to each other. Therefore, to proceed further in relevant research, ADVANCES is used as proxy of Economic Growth on the basis of above results.

**Table-2**  
**Unit Root Test for Advances**

Null Hypothesis: D(LN_ADVANCES,2) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-3.845599	0.0052
Test critical values:	1% level		-3.600987	
	5% level		-2.935001	
	10% level		-2.605836	
*MacKinnon (1996) one-sided p-values.				

**Table-3**  
**Unit Root Test for Deposits of Islamic Banks**

Null Hypothesis: D(DIB,2) has a unit root				
Exogenous: Constant				
Lag Length: 2 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-7.788196	0.0000
Test critical values:	1% level		-3.711457	
	5% level		-2.981038	
	10% level		-2.629906	
*MacKinnon (1996) one-sided p-values.				

**Table-4**  
**Unit Root Test for INFLATION RATE**

Null Hypothesis: D(INF_RATE,2) has a unit root				
Exogenous: Constant				
Lag Length: 6 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-5.638350	0.0001
Test critical values:	1% level		-3.661661	
	5% level		-2.960411	
	10% level		-2.619160	
*MacKinnon (1996) one-sided p-values.				

The above table shows Unit Root Test (Augmented Dickey-Fuller) for Advances. For this purpose Unit Root Test was applied on Log of Advances. The results show that LN\_ADV became stationary at second difference since p-value (0.0052) is less than 0.05. It implies LN\_ADV does not have unit root.

The above table shows Unit Root Test (Augmented Dickey-Fuller) for Deposits of Islamic Banks. For this purpose Unit Root Test was applied on Log of Deposits of Islamic Banks. The results show that LN\_DIB became stationary at second

difference since p-value (0.0000) is less than 0.05. It implies LN\_DIB does not have unit root.

The above table shows Unit Root Test (Augmented Dickey-Fuller) for Inflation Rate. For this purpose Unit Root Test was applied on Inflation Rate at different levels. The results show that Inflation Rate became stationary at second difference since p-value (0.0001) is less than 0.05. It implies Inflation Rate does not have unit root.

**Table-5**  
**Unit Root Test for Foreign Direct Investment**

Null Hypothesis: D(FDI,2) has a unit root				
Exogenous: Constant				
Lag Length: 3 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-8.522319	0.0000
Test critical values:	1% level		-3.626784	
	5% level		-2.945842	
	10% level		-2.611531	
*MacKinnon (1996) one-sided p-values.				

**Table-6**  
**Unit Root Test for Interest Rate**

Null Hypothesis: D(INT,2) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Fixed)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-6.618878	0.0000
Test critical values:	1% level		-3.653730	
	5% level		-2.957110	
	10% level		-2.617434	
*MacKinnon (1996) one-sided p-values.				

The above table shows Unit Root Test (Augmented Dickey-Fuller) for Foreign Direct Investment. For this purpose Unit Root Test was applied on Foreign Direct Investment at different levels. The results show that Foreign Direct Investment became stationary at second difference since p-value (0.0001) is less than 0.05. It implies Foreign Direct Investment does not have unit root.

The above table shows Unit Root Test (Augmented Dickey-Fuller) for Interest Rate. For this purpose Unit Root Test was applied on Interest Rate at different levels. The results show that Interest Rate also became stationary at second difference since p-value (0.0000) is less than 0.05. It implies Interest Rate does not have unit root.

Since there was no stationarity found in time series data initially, therefore, data got stationary at second difference by applying Augmented Dickey Fuller for Unit Root Test. As initial level does not show stationarity in data, Auto Regressive Distributed Lag Model is decided to be applied to predict Economic Growth based on INF, FDI, INT and DIB.

**Table-7**  
**Model Summary of ARDL**

R-squared	0.999982
Adj. R-squared	0.999617
Sum sq. resids	9.03E-06
S.E. equation	0.003006
F-statistic	2739.825
Log likelihood	130.5454
Akaike AIC	-9.958674
Schwarz SC	-8.917224
Mean dependent	6.852762
S.D. dependent	0.153530

The above table of Model Summary shows the overall strength of the Auto Regressive Distributed Lag Model. The Value of Adjusted R Square in table-7 shows that almost 99.96% variation in the regression model is explained by predictors (Deposits of Islamic Banks, Inflation Rate, Interest Rate and Foreign Direct Investments). The table also shows the value of F-Statistics which is 2739.825 that also supports the ARDL Model of be significant.

**Table-8**  
**Vector Autoregression Estimates**

Vector Autoregression Estimates					
Sample (adjusted): 2004Q1 2010Q4					
Included observations: 22 after adjustments					
Standard errors in ( ) and t-statistics in [ ]					
	LN_ADV	LN_DIB	INTEREST	INF_RATE	FDI
LN_ADV(-1)	-0.364247 (0.32636) [-1.11610]	-111.7142 (44.4425) [-2.51368]	-191.8663 (167.953) [-1.14238]	284.0374 (399.792) [ 0.71046]	-31433.60 (4976.74) [-6.31610]
LN_ADV(-2)	1.592457 (0.45818) [ 3.47561]	98.36756 (62.3937) [ 1.57656]	211.1621 (235.792) [ 0.89554]	78.82298 (561.275) [ 0.14044]	6480.723 (6986.94) [ 0.92755]
LN_ADV(-3)	-0.141150 (0.42541) [-0.33179]	-41.25064 (57.9317) [-0.71206]	38.64268 (218.930) [ 0.17651]	-481.3320 (521.137) [-0.92362]	30980.53 (6487.29) [ 4.77558]
LN_ADV(-4)	-0.383540 (0.32203) [-1.19101]	64.65273 (43.8528) [ 1.47431]	-69.33673 (165.724) [-0.41839]	170.0292 (394.487) [ 0.43101]	-11331.13 (4910.71) [-2.30743]
LN_DIB(-1)	0.012980 (0.00544) [ 2.38695]	-0.038886 (0.74052) [-0.05251]	2.240988 (2.79852) [ 0.80078]	-7.399569 (6.66154) [-1.11079]	1122.980 (82.9251) [ 13.5421]
LN_DIB(-2)	0.022999 (0.00498) [ 4.62101]	0.359411 (0.67776) [ 0.53030]	2.641070 (2.56131) [ 1.03114]	-3.716941 (6.09690) [-0.60964]	869.1923 (75.8962) [ 11.4524]
LN_DIB(-3)	0.031311 (0.00740) [ 4.23354]	0.611585 (1.00717) [ 0.60723]	4.117076 (3.80618) [ 1.08168]	-6.853392 (9.06017) [-0.75643]	1274.415 (112.784) [ 11.2996]
LN_DIB(-4)	0.020496 (0.00693) [ 2.95620]	1.477052 (0.94414) [ 1.56444]	3.813612 (3.56801) [ 1.06883]	-8.476267 (8.49323) [-0.99800]	1279.897 (105.727) [ 12.1057]
INTEREST(-1)	-0.000118 (0.00134) [-0.08787]	0.127329 (0.18292) [ 0.69610]	-0.249189 (0.69127) [-0.36048]	0.488305 (1.64548) [ 0.29676]	-83.17858 (20.4834) [-4.06077]
INTEREST(-2)	-0.000326 (0.00101) [-0.32391]	-0.348324 (0.13706) [-2.54143]	-0.434632 (0.51796) [-0.83913]	-0.087344 (1.23294) [-0.07084]	-50.31963 (15.3480) [-3.27857]
INTEREST(-3)	6.13E-05 (0.00104) [ 0.05897]	0.247675 (0.14163) [ 1.74873]	-0.290579 (0.53524) [-0.54290]	0.986551 (1.27407) [ 0.77433]	-59.36608 (15.8601) [-3.74311]
INTEREST(-4)	-0.001919 (0.00080) [-2.40416]	-0.214409 (0.10870) [-1.97256]	0.297778 (0.41077) [ 0.72492]	0.222282 (0.97780) [ 0.22733]	11.68282 (12.1719) [ 0.95982]

INF_RATE(-1)	0.000979 (0.00062) [ 1.57193]	-0.081800 (0.08484) [-0.96419]	-0.444808 (0.32061) [-1.38738]	1.150109 (0.76318) [ 1.50700]	-69.53347 (9.50027) [-7.31910]
INF_RATE(-2)	-0.000232 (0.00123) [-0.18840]	0.307800 (0.16758) [ 1.83673]	0.281011 (0.63330) [ 0.44372]	-0.172839 (1.50751) [-0.11465]	52.44629 (18.7660) [ 2.79476]
INF_RATE(-3)	-0.008152 (0.00168) [-4.84435]	-0.590323 (0.22916) [-2.57599]	-0.218474 (0.86603) [-0.25227]	0.524897 (2.06149) [ 0.25462]	-132.9182 (25.6621) [-5.17956]
INF_RATE(-4)	0.000532 (0.00144) [ 0.36976]	-0.228395 (0.19589) [-1.16596]	-0.020246 (0.74027) [-0.02735]	1.840207 (1.76213) [ 1.04431]	-258.1109 (21.9356) [-11.7668]
FDI(-1)	-4.49E-05 (8.9E-06) [-5.03047]	-0.001250 (0.00122) [-1.02774]	-0.003776 (0.00460) [-0.82139]	0.010583 (0.01094) [ 0.96725]	-1.382981 (0.13621) [-10.1536]
FDI(-2)	-5.19E-05 (1.3E-05) [-4.11301]	-0.001921 (0.00172) [-1.11706]	-0.003531 (0.00650) [-0.54323]	0.013284 (0.01547) [ 0.85863]	-1.828876 (0.19259) [-9.49632]
FDI(-3)	-2.44E-05 (1.0E-05) [-2.40430]	-0.003574 (0.00138) [-2.58944]	-0.003997 (0.00522) [-0.76636]	0.009071 (0.01241) [ 0.73065]	-1.879982 (0.15454) [-12.1647]
FDI(-4)	1.06E-05 (6.2E-06) [ 1.69206]	-0.000896 (0.00085) [-1.05515]	-0.003134 (0.00321) [-0.97629]	0.006859 (0.00764) [ 0.89773]	-1.493174 (0.09511) [-15.6995]
C	1.987191 (0.45287) [ 4.38795]	-7.186033 (61.6711) [-0.11652]	12.28903 (233.061) [ 0.05273]	-379.2899 (554.775) [-0.68368]	41333.16 (6906.03) [ 5.98509]
R-squared	0.999982	0.992898	0.994478	0.994829	0.999504
Adj. R-squared	0.999617	0.850851	0.884046	0.891404	0.989576
Sum sq. resids	9.03E-06	0.167514	2.392375	13.55572	2100.608
S.E. equation	0.003006	0.409285	1.546730	3.681809	45.83239
F-statistic	2739.825	6.989930	9.005336	9.618825	100.6833
Log likelihood	130.5454	22.43836	-6.810333	-25.89007	-81.36499
Akaike AIC	-9.958674	-0.130760	2.528212	4.262734	9.305908
Schwarz SC	-8.917224	0.910689	3.569662	5.304184	10.34736
Mean dependent	6.852762	10.68718	6.246523	114.6697	701.7273
S.D. dependent	0.153530	1.059780	4.542263	11.17258	448.9152
Determinant resid covariance (dof adj.)		0.000000			
Determinant resid covariance		0.000000			

The table-8 shows the coefficients of all independent variables with their significant values of t-statistics. In the presence of LN\_ADV as a dependent variable, the independent variable LN\_DIB is found to be significant at Lag 1, 2, 3, and 4 with t-statistics of 2.38695, 4.62101, 4.23354 and 2.95620 respectively.

Other than this LN\_ADV is significant at Lag 2 with t-statistics of 3.47561 and Foreign Direct Investment is significant at Lag 4 with t-statistics of 1.69206. Whereas, rest of the lag values of independent variables are insignificant. The beta coefficients values of each significant variable shows that:



One unit change in  $LN\_ADV_{t-2}$  brings 1.5925 unit significant change in  $LN\_ADV_t$   
One unit change in  $LN\_DIB_{t-1}$  brings 0.0130 unit significant change in  $LN\_ADV_t$   
One unit change in  $LN\_DIB_{t-2}$  brings 0.0230 unit significant change in  $LN\_ADV_t$   
One unit change in  $LN\_DIB_{t-3}$  brings 0.0313 unit significant change in  $LN\_ADV_t$   
One unit change in  $LN\_DIB_{t-4}$  brings 0.0205 unit significant change in  $LN\_ADV_t$   
One unit change in  $FDI_{t-4}$  brings  $1.06 \times 10^{-5}$  unit significant change in  $LN\_ADV_t$

Hence, considering the above values of beta-coefficients, following Auto Regressive Distributed Lag Model is formulated:

$$\begin{aligned} LN\_ADV_t = & 1.9872 - 0.3642LN\_ADV_{t-1} + 1.5924LN\_ADV_{t-2} - \\ & 0.1412LN\_ADV_{t-3} \\ & - 0.3835LN\_ADV_{t-4} + 0.0130LN\_DIB_{t-1} + 0.0230LN\_DIB_{t-2} \\ & + 0.0313LN\_DIB_{t-3} + 0.0205LN\_DIB_{t-4} - 0.0001INT_{t-1} \\ & - 0.0003INT_{t-2} + 6.13(10)^{-5}INT_{t-3} - 0.0019INT_{t-4} + 0.0010INF_{t-1} \\ & - 0.0002INF_{t-2} - 0.0082INF_{t-3} + 0.0005INF_{t-4} - 4.49(10)^{-5}FDI_{t-1} \\ & - 5.19(10)^{-5}FDI_{t-2} - 2.44(10)^{-5}FDI_{t-3} + 1.06(10)^{-5}FDI_{t-4} + \epsilon_t \end{aligned}$$

This research is based on the study of Islamic Investment Trend and its impact on Economic Growth. Therefore, the hypothesis was to see if there is significant impact of Islamic Investment Trend on Economic Growth. Therefore, Deposits of Islamic Banks was taken as a major independent variable of the research along with control variables as Inflation Rate, Interest Rate and Foreign Direct Investment. In this study although some of the predictors are found to be insignificant but mainly Deposits of Islamic Bank was tested and result was concluded as follows:

**Table-9**  
**Hypothesis Assessment Summary**

	Hypothesis Developed	$\beta$	t-statistics	Empirical Conclusion
H1	There is a significant impact of Deposits on Advances	$0.0130_{t-1}$ $0.0230_{t-2}$ $0.0313_{t-3}$ $0.0205_{t-4}$	2.38695 4.62101 4.23354 2.95620	Accepted

This study brings the attention of developing countries like Pakistan towards Islamic Financial System where Muslim population in majority has valid reason to show their interest in making the system successful. Since Muslims are well aware of the drawbacks of interest-based financial system according to the teachings of Islam, they are expected to respond positively in this regards to promote Islamic Financial System. This study shows that there is significant positive impact of Islamic Investment Trend on Economic Growth of Pakistan. Although data collected in this research is quarterly-based data of the last ten years, results are much significant to support the hypothesis (H1) i.e. there is significant impact of Deposits of Islamic Banks on Economic

Growth of Pakistan. Other than Deposits of Islamic Banks, Inflation, Interest Rate and Foreign Direct Investment were also taken as control variable among which only Foreign Direct Investment was significant at Lag-4, whereas, rest of the control variables are found insignificant in regression model to depict the value of Advances (as a proxy of Economic Growth).

Reasons for Inflation and Interest Rate to be insignificant can be so many. One of the reasons for Interest Rate to be insignificant in this study could be its distortion. Practically Interest Rate varies from sector to sector, whereas, Interest Rate announced by State Bank of Pakistan is constant. Other Hence it is meant that as Deposits of Islamic Banks has significant impact on Advances, Advances may have multiplier effect on the economy and may cause economy to grow in a favorable economic and social environment. Other reason could be Deposits of Islamic Banks where Interest Rate is coincide with it in relation to Advances of Scheduled Banks. As far as Inflation is concerned, this research mainly focuses on Inflation based on CPI, therefore, advances offered by scheduled banks carry a minor part of borrowings for personal consumption, and, major part of it carry long-term investment expenditure by business sector.

## Conclusion

This research was conducted under the scenario of economy of Pakistan where economic growth depends upon multiple factors that may be of social and economical based. To find out the impact of Islamic Investment Trend on Economic Growth, Deposits of Islamic Banks have been taken as to represent Islamic Investment in Pakistan, whereas, Advances of Scheduled Banks has been taken as a proxy of Economic Growth. Other than major independent variable, Inflation, Interest Rate and Foreign Direct Investment have been taken as control variable to strengthen the regression model. As per the study it was found that Deposits of Islamic Bank has significant positive impact on Advances of Scheduled Banks. Even though some other factors such as political stability, human development index, interest rate, foreign trade policy, unemployment and government expenditure etc. have not been taken as a part of study, it is believed that results could have been more significant in the presence of such other variables.

## Suggestions and Recommendations

This research provides a platform to economic policymakers to analyze and realize the importance of Islamic Financial System in developing countries like Pakistan. It may provide basis to such economic body to look for the ways through which Islamic Financial System can be implemented successfully with no doubts in the mind of potential investors who may bring a positive change in economic activities of a country, ultimately, causing economic growth rate to be increased. Through this research those who are interested in carrying out research in the field of Islamic Banking System may also be benefited. For future research, more variables can be included in the area of research

with greater size of sample including variations of quarterly, semi-annually and annually observations for each variable studied. It also helps to open a new area of research through which it can be determined if Islamic Financial System is successfully applicable in a developing country like Pakistan. Other mode of Islamic Finance can also be a part of future research to have an idea in a broader sense how Islamic mode of finance other than Deposits of Islamic Banks may have impact on Economic Growth of a country. As it is proved through this research that Deposits of Islamic Banks have significant positive impact on Advances, it is to be realized that such efforts should be made in the field of Islamic Financial System so that the factor of reluctance, doubts and confusions about Islamic mode of Finance could be clarified among people who are interested in becoming a part of it directly or indirectly. Realizing the significance of Islamic Investment Trend, the Shariah Board should also play its vital role to practice Islamic Financial System as per the rules and regulations described by Quran and Sunnah.

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