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## THE IMPACT OF PROFITABILITY ON THE MARKET SIZE OF ISLAMIC BANKING IN PAKISTAN

## (A CASE STUDY OF PANEL DATA 2007-2016)

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## ABSTRACT

The study describes the profitability and market size of Islamic Banking. The research focuses on the market size increases by profitability of Islamic banking. This study describes the unique area of market size of Islamic banking by using the profitability. The profitability ratios are Return on Asset and Return on Equity by using Gearing Ratio, Payout Ratio, Asset Turnover and EPS as variables to gauge the profitability either concurrently or partly on Islamic banking of Pakistan. ROA and ROE are dependent variables. Gearing Ratio, Payout Ratio, Asset Turnover, and EPS are independent variables. This study is a secondary base and the numerical value of the data is 100 observations. The selected sample size is ten Islamic Banks. The sample data periods selected from 2007 to 2016. The Panel unit root test is conducted for prerequisite of panel data. The balance panel data technique is applied. The overall

model of ROA and ROE show significant results its significance value is less than 5%. The study finalized significant results by taking neutralizing the other external variables that the factors of profitability impact on the market size of Islamic banking. The result approves the study is significantly correlated with profitability and market size of Islamic Banking.

Keywords: Profitability; Market Size; Islamic Banking; Pakistan

Jell Classification: F36; J21; G32; E62

#### 1.01. INTRODUUTION

banking system is containing Islamic banking services, activities Islamic (commercial and share banking), Islamic takaful, another Islamic investment markets, Islamic microfinance and non-bank institutions are older more than a century. The Sharia rules and regulations firstly developed by Mit Ghamr Money-Savings plan inaugurated in Egypt in 1963. Mit Ghamr provided the deposits into the small loan forms (Chong and Liu - 2009). From that point forward, Islamic Finance (IF) created an amazing profit in number (more than 400 organizations all over the world), earned (\$ 750 billion in resources), and in development rate (10% - 15% for each annum). Islamic Finance is working in more than 75 nations (ADB - 2009), in the five continents, mostly Islamic Financial Institutions (IFIs) are working in the GCC and Southeast Asia. Asia and the Middle East is a good market for Islamic Banking. Besides, interest for Islamic fund items presents development patterns could see as much as \$24 billion in investment funds for every year streaming to Islamic reserve funds items from family units by 2020 (Sproule et al. - 2007).

#### **Islamic Banking in Pakistan**

From the past 63 years Pakistan improves the Islamic Banking financial system. Formerly it undertakes lack of capital and wavering due to established political and socioeconomic catastrophe. Resultant adjustments were needed to measure the power and function of State Bank of Pakistan from side to side. State Bank of Pakistan Act 1956 encourages the private sector to organize financial institutions and Banks. In buildup privatization developments in the banking sector which begin in 1992 motivated local investors and motivated foreign banks. A network of the banking system in Pakistan amounted to PRs. 638 billion in 2008-2009, which was PRs. 131 billion in 2003-2004. While total assets for the banking sector amounted to PRs. 5595 billion in 2008-2009, those were PRs. 3003 billion in 2003-2004. At present 5 Islamic banks and 24 conventional banks are participating in the extremely competitive atmosphere (Ahmad, Malik, and Humayoun - 2010).

expanded investment of Sariah the However. with an researchers in arrangement made, result design, review moreover supervision, the second stage for Islamic banking since 2002 need to be seen great and reliable growth. Business for 12% business stake attained on barely over a decade. Ultimately at the year-end 2015 downright, Islamic banking advantages in Pakistan remained during PRs 1.3 trillion same time aggregate Islamic saving money stores remained in PRs 1.1 trillion. In the budgetary sector, liquidity is also manageability. Assumes a huge role, liquidity will be the capacity of budgetary organization with meet those commitments of its lenders (short-term) as an effect from claiming this commitment. It might be vital for a monetary organization to hold a sizeable add up to their benefits to trade should meet their transient commitment. An association needs a sensible liquidity level for it with a chance to be aggressive also reasonable. Thus, firm necessity chooses those the majority ideal level of the liquidity in place to guarantee.

The investment of deposits and asset reflects a shortage of diversification, which make a risky market. Islamic banks invest the amount in physical products. An average, the study indicated that Islamic bank put their investments in trade 32%, industry 18%, Real estate 15%, Services sector 11%, Agriculture 5% and beverages 17%. These modes of investments show financial the behavior of Islamic banking (Kahf - 1999).

#### **RESEARCH PROBLEM**

The banks' profit distributes into two factors one is internal another external cause these are both the reason for profitability. The current study will investigate the internal factors, which concerned with particular decisionmaking and policies reforms. The study defines a problem in profit and market size Islamic Banking Pakistan. As discussed the of in in research questionnaires, the purpose of the study to investigate the profitability by using ROA and ROE profitability factors. The study depends upon the different ratios gearing ratio, payout ratio, earnings per share, and asset turnover which gave a positive relationship with the profitability. This study fills profitability gap from 2007 to 2016. The earlier studies majorly focused on conventional banking profitability. The researcher attempts to test the theories relating to profitability. The researcher needs to find out that how much deposit, loans, and market size related to banks profitability. The researcher emphasizes the internal structure of banking and provides a relationship between assets, loans, and capital earned.

#### **RESEARCH QUESTION**

Based on the above background of the study, these are the following questionaries' which elaborates the main foundation of study.

1) What is the role of ROA in generating Islamic Banking earnings per share?

2) What is the role of ROA in generating Islamic Banking Asset turnover?

3) What is the role of ROA in generating Islamic Banking Gearing Ratio?

4) What is the role of ROA in generating Islamic Banking Payout Ratio?

5) What is the role of ROE in generating Islamic Banking Earnings per share?

6) What is the role of ROE in generating Islamic Banking Asset turnover?

7) What is the role of ROE in generating Islamic Banking Gearing Ratio?

8) What is the role of ROE in generating Islamic Banking Payout Ratio?

#### **OBJECTIVES OF THE STUDY**

Based on the above-designed questionaries' the present studies have structured objectives formed as follows:

1) To investigate that ROA has a significant and positive impact on Islamic Banking Asset Turnover.

2) To investigate that ROA has a significant and positive impact on Islamic Banking Earnings per share.

3) To investigate that ROA has a significant and positive impact on Islamic Banking Gearing Ratio.

4) To investigate that ROA has a significant and positive relationship on Islamic Banking Payout Ratio.

5) To investigate that ROE has a significant and positive impact on Islamic Banking Asset Turnover.

6) To investigate that ROE has a significant and positive impact on Islamic Banking Earnings per share.

7) To investigate that ROE has a significant and positive impact on Islamic Banking Gearing Ratio.

8) To investigate that ROE has a significant and positive relationship on Islamic Banking Payout Ratio.

#### 2.0. Literature review

As the theory of conventional banking system explains that the market larger the more the profit will earn by the banks in comparison with the Islamic Banks. This research focus on the external factors depends on Islamic mode of financing. The theory of conventional banking is not fit for Islamic Banking. As discussed conventional bank monopolized the market, but Islamic banks can easily managed the competitive market. That trade which works in competitive environment gets the changes and creates innovations. The researchers findings are conventional banking perform well in monopolistic environment and free from all the religious restrictions and rules but Islamic banks perform in competitive businesses (Sudin Haron - 1996). Islamic Banking analysis in eight different countries, the researcher selects the macroeconomic factors and monetary structure as an independent variable to gauge the performance of Islamic sector. In the study he selects the research area of fourteen Islamic Banks from Middle East countries like: Jordan, Bahrain, Qatar, Turkey, Sudan, UAE, Kuwait, and Egypt. The sample of research period he selected between 1993 and 1998. He selected the variables return on asset (ROA), return on equity (ROE), Non-interest margin (NIM) as a performance measures. The researcher also used internal and external variables. The internal variables were Bank Size, Capital Adequacy Ratio, lending's, short-term financing, overhead expenses, and capital. The external independent variables were GDP, regulation and stock exchange. The consequences of the study were providing a relationship between performance and macroeconomic factors. The results of research reveal that macroeconomic factors and overhead expenses for Islamic Banks have a positive and favorable relationship with the profitability. Because expenses increase profitability also increases (Bashir - 2000).

The study method used is relative percentage method. The writer explains that forces of the demand and supply explain the ratio of profit loss sharing between the users and suppliers of capital. The conclusion is to use the Islamic approach to money, Banking and Monetary policy (Siddiqi N. - 1983). Greek bank profitability system which measures the efficiency of medium and big size banks in Greece. The ratios that the researcher uses are ROA, ROE, and Net Margin Ratio (MARG). The study comprises total 23 numbers of banks and data is collected from 1990 – 1991. The findings of study explain a positive relationship of ROA and ROE (Spathis, Kosmidou, and Doumpos - 2002). Islamic Bank prohibited trading those commodities which destroy the moral values and system of Islam. Case in point, Islamic banks will not financially support wine, tobacco, a bar, a dance club or the activities which banned by Islam or are damaging to the society (Iqbal and Molynex - 2005).

Return on asset (ROA) and returned on equity (ROE) shows the performance of banking sector and the descendant explains the returns to the owner. Due to the grave factors, the researcher used these two measures of profitability. According to (Sinkey - 2002), these

two measures are the best variables for the profitability of banks (Habibullah and Sufian (2009), Williams (2003), Siddiqi (2003) and Kosmidou (2008)). The Dividend payout ratio and gearing ratios were used as an independent variable these two variables were shown positive relationships according to previous studies these two are the greater impact on firm's profitability (Amidu & Joshua - 2006). Darsono (2005: 54) said, "The debt to equity ratio explains the proportion of provisions finance by the shareholder to the creditor." The superior portion of obligation used for investment stature. These ratios are liquidity covering ratios. (Riyanto - 2001: 25): (Kuswadi, 2005: 90: Irwin, 2011). According to previous studies, it has a positive relationship with the profitability factors i.e. Return on Asset and Return on Equity. (Breasley &Myers - 1991; Kotler - 2001; Fitzgerald et al. 1981; Gibson, 1992)

## Methodology

A methodology is the systematic, theoretical examination of the methods functional to a field of study. It encompasses the theoretical investigation of the body of approaches and principles connected with a branch of facts. The present research is to demonstrate the market size and profitability of Islamic Banking in Pakistan. The research is conducted in Pakistan.

The study consists of two components i.e. profitability and market size of Islamic Banks in Pakistan. In order to analyze the profitability of Islamic Banking in Pakistan, the researcher used the liquidity and profitability ratios. The Liquidity ratio is Return on Equity and profitability is Return on Asset. The research goal is to mark the value of shareholder equity to maximizing the profitability of Islamic Banks.

This study supported out the two purposes. Firstly, ROA and ROE clearly explain the profitability factor of IBP. Secondly, the market size of Islamic Banking. The ordinary least square method is used for this study. The use of this methodology is flexible based on the number of preceding studies that are used for the profitability of banking sector.

#### Hypothesis

**H1**: ROA is positively correlated with the impact of profitability and market size of Islamic banking

**H2:** ROE is positively correlated with the impact of profitability and market size of Islamic banking

α=5%

**Decision Criteria = Reject H**<sub>0</sub>, if P value is less than  $\alpha$ . Or "Accept" H<sub>0</sub>, if P value is greater than  $\alpha$ .

## Variables

Dependent Variable:

Symbols	Variables	Proxies
Y <sub>1</sub>	ROA (Return on Assets)	Net operating income / Total Assets
Y <sub>2</sub>	ROE (Return on Equity)	EACS / Common Stock Equity

#### **Independent Variable:**

Symbols	Variables	Proxies
X <sub>1</sub>	Gearing Ratio	Total Debt / Equity
X <sub>2</sub>	Payout ratio	Dividends per Share (DPS) / EPS
X <sub>3</sub>	Asset Turnover	Asset Turnover = Revenues / Total
		ASSELS
$X_4$	EPS	Net Income – dividend on prefer stock /
		average ordinary share

**Estimated Model** 

 $ROA = \alpha + X_1 \beta 1 + X_2 \beta 2 + X_3 \beta 3 + X_4 \beta 4 + \varepsilon$ 

 $ROE = \alpha + X_1 \beta 1 + X_2 \beta 2 + X_3 \beta 3 + X_4 \beta 4 + \notin$ 

#### **Theoretical Framework**

#### **Financial Management Theory**

The financial management according to JB Bradley: "Financial management is a business management trait for the use of capital wisely and the cautious choice from the capital bases which allows the expenditure unit to transfer towards achieving its goal". The definition of the financial management, financial management is the procedure of companies which elaborates with sources of funds, uses of funds, and proper management of assets suitable for the company's overall objectives (Gobson, 1992; Fuller, Farrel, 1991; Malone and Jones, 1993; Myers and Majluf, 1984).

# Variable Used in the Study ROA/ROE

It is qualified to measure banking financial efficiency. The present study uses two proxies for profitability. One is named as return on asset (ROA) and the other named as returned on equity (ROE). The first variable shows the performance of banking sector and the descendant explains the returns to the owner. Due to the grave factors, the researcher used these two measures of profitability. According to Sinkey (2002), these two measures are the best variables for the profitability of banks by Habibullah and Sufian (2009), Williams (2003), Siddiqi (2003) and Kosmidou (2008). The annual financial statements were studied by using the profitability from two dimensions (Return on Asset and Return on Equity) and Explanatory variables such as Earnings per share, Gearing Ratio, Payout Ratio and Asset Turnover.

#### **Asset Turnover:**

The researcher uses the Asset Turnover as an independent variable, the previous theories indicate that the relationship of asset turnover was established to be positive relation with ROA and ROE which are the profitability factors discus with previous studies (Tarawneh - 2006); (Boudriga and Jellouli - 2009); (Chirwa- 2003); (Miller & Noulas - 1997).

#### **Gearing Ratio & Payout Ratio:**

Payout ratio and Gearing ratio great influence on refining earnings variations, intended to enhance the profit. The Dividend payout ratio and gearing ratios were used as an independent variable these two variables were shown positive relationships according to previous studies these two are the greater impact on firm's profitability (Amidu and Joshua - 2006). Darsono (2005: 54) said, "The debt to equity ratio explains the proportion of provisions finance by the shareholder to the creditor." The superior portion of obligation used for investment stature. These ratios are liquidity covering ratios. (Riyanto - 2001: 25), (Kuswadi, 2005: 90: Irwin, 2011).

#### **Earnings per Share:**

Earnings per share used as an independent factor of profitability. The objective of this variable prescribes principle for determining and presenting amount to improve performance comparisons. According to previous studies, it has a positive relationship with the profitability factors i.e. Return on Asset and Return on Equity. (Breasley and Myers - 1991; Kotler - 2001; Fitzgerald et al. 1981; Gibson, 1992)

#### **Conceptual Framework**



#### Why We Use Panel Unit Root Test

- Panel unit root test used to check the stationary and non-stationary of data.
- Panel unit root test is more sutiable mesure to study the dynamics of change than cross sections.
- Panel unit root test include at least two scopes cross sectional and time series.
- Panel unit root test might reduce the favoritism that can result if we combined all the individuals into two wide groups.

There are different types of test which can use in panel unit root test.

#### Levin, Lin and Chu Test

Levin Lin Chu Test projected in (2002) is the test when data is required to be pooled

into a solo final regression. The hypothesis of Levin Lin Chu Test is:

H<sub>0</sub>: Panel Data has unit root test (Data has stationary)

H<sub>1</sub>: Panel Data has not unit root test (Data has stationary)

#### Breitung (2000)

A test for a unit root or stationary in a panel data set. The Breitung test assumes a:

H<sub>0</sub>: Panel Data has unit root test (assumes common unit root process)

 $H_1$ : Panel Data has not unit root test

#### Im, Pesaran and Shin (2003)

The Im, Pesaran and Shin test is better than Levin, Lin and Chu Test because it diversified the factors or coefficients.

 $H_0$ : Panel Data has unit root test (assumes individual unit root process) (Non-Stationary)

H<sub>1</sub>: Panel Data has not unit root test (Stationary)

## Fisher Type Test using ADF and PP Test (Maddala and Wu (1999) and Cho (2001))

Assume individual unit root process:

H<sub>0</sub>: Panel Data has unit root test (assumes individual unit root process)

 $H_{1:}$  Panel Data has not unit root test

#### Hadri (1999)

Assume common unit root process:

H<sub>0</sub>: Panel Data has not unit root test (assumes common unit root process) (Stationary)

H<sub>1:</sub> Panel Data has not unit root test (Non-Stationary)

#### **Panel Estimation Techniques:**

#### **Pool regression model:**

Panel (data) analysis is a statistical method, widely used in social science, epidemiology, and econometrics to analyze two-dimensional (typically cross sectional and longitudinal) panel data. The data are usually collected over time and over the same individuals and then a regression is run over these two dimensions.

#### Fixed effect model:

In the fixed effect test we assume that effect size is same for all the studies. Fixed effect model all us individuality between the 10 banks by consenting to have its particular intercept value. The intercept value does not differ across the time. In the fixed effect test the null hypothesis being that there is zero.

#### **Random effect model:**

In random effect test we assume that effect size varies from study to study. In this model banks should have same means for the intercept value. In random effect model intercept differ across time. In the random effect model the null hypothesis being tested that there is a zero. This model has less specifications to approximate.

#### Hausmant effect model:

Hausman tests (Hausman 1978) are tests for econometric model misspecification based on a comparison of two different estimators of the model parameters. The estimators compared should have the properties that (1) under the null hypothesis of correct model specification both estimators are consistent for the "true parameters" of the model (those corresponding to the data generating process), whereas (2) under misspecification (the alternative hypothesis) the estimators should have differing probability limits. The former property ensures that the size of the test can be controlled asymptotically, and the latter property gives the test its power. Heuristically, the key idea is that when the model is correctly specified, the compared estimators will be close to one another, but when the model is miss specified, the compared estimators will be far apart.

## **Empirical Analysis**

First Model: ROA =  $\alpha_i + \gamma$ (Gearing ratio)'<sub>it</sub> +  $\gamma$ (Payout ratio)'<sub>it</sub> +  $\gamma$ (Asset turnover)'<sub>it</sub> +  $\gamma$ (EPS)'<sub>it</sub>+ $\varepsilon_{it}$ 

#### **Panel Estimation Techniques:**

#### Table: 4.2.5: Hausman Test

Cross-section random effects test equation:							
Dependent Variable: ROA							
Variable Coefficient Std. Error t-Statistic Prob.							
С	1.249458	0.545548	2.290282	0.0245			
ASSET TURNOVER	4.815759	1.03641	4.646577	0.0000			
EPS	0.027675	0.054423	0.508522	0.6124			
PAYOUT RATIO	-0.009539	0.006538	-1.459075	0.1482			
GEARING RATIO	0.004572	0.01734	0.263691	0.7926			
Effects Specification							
Cross-section fixed (dummy variables)							
R-squared 0.81806 Mean dependent var 2.2805							
Adjusted R-squared	0.790558	558 S.D. dependent var 2.614305					
S.E. of regression	1.196433	Akaike info criterion 3.325744					
Sum squared resid 123.1049 Schwarz criterion 3.690468							
Log likelihood	-152.2872	2 Hannan-Quinn criter. 3.473354					
F-statistic	29.7449	Durbin-Watson stat 0.624534					
Prob(F-statistic)	0.0000000						

The cross-section random effect shows that the independent variable asset turnover shows the positive effect and significant impact on dependent variable. The EPS ratio analysis effect show a positive and insignificant impact on the dependent variable ROA which value is higher than 5%. According to the previous study Yousef (2009) shows that payout ratio is negative and insignificant effect on ROA. Gearing ratio is positive and significant impact on dependent variable ROA. The value of R-Squared is 81.8060% which represents that ROA is changed by 81.8060% by independent variables and Adjusted R-squared value is 79.0558% indicates that 79.0558% error is existed. The p value of overall model is 0.0000 which is less than 5% show the whole model is significant and ROA from the banks reveals that significant results, the value of Durbin Watson Statistics is 0.624534 which shows a positive correlation.

#### Table No.: 4.2.5: Random Effect Model

Dependent Variable: ROA Method: Panel EGLS (Cross-section random effects)

Variable	Coefficient Std. Error		t-Statistic	Prob.
ASSET TURNOVER	4.209532 0.565777		7.440267	0.00000
EPS	0.066425	0.040935	1.6227	0.108
GEARING RATIO	-0.003402	0.016348	-0.208099	0.8356
PAYOUT_RATIO	-0.006586	0.00598	-1.101371	0.2735
С	1.144103	0.550367	2.078799	0.0403
	Effects Spe	ecification		
			S.D.	Rho
Cross-section random	1.045534	0.433		
Idiosyncratic random	1.196433	0.567		
	Weighted	Statistics		
R-squared	0.363067	endent var	0.77599	
Adjusted R-squared	0.336249	S.D. depen	ident var	1.49687
S.E. of regression	1.21952	Sum squar	ed resid	141.286
F-statistic	13.53808	Durbin-Wa	atson stat	0.73466
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.60829 Mean dependent v			2.2805

Sample: 2007 2016

After the results of hausman effect random effect model is appropriate in dependent variable ROA. These results show that the independent variable asset turnover from the 2007 - 2016 is positive and significant results. The independent variable EPS is positive and insignificant impact on dependent variable. The gearing ratio and payout ratio the probability value p > 5%, the results are negative and insignificant. The overall model is appropriate and show a positive serial correlation between the variables. The Durbin Watson value is 0.73466 which represent the autocorrelation between the variables. The F-Statistic value is 13.53808 and Standard error of regression is 1.21952. The overall probability value is 0.0000. So, the results are accepted and show the model is good for profitability of Islamic banking. The R-squared value is 36.3067% which have low value of independent variable correlated with dependent variable ratio. The adjusted R-squared value is 33.6249% which is also low and show the external variable impact. Second Model:

 $ROE = \alpha_i + \gamma (Gearing ratio)'_{it} + \gamma (Payout ratio)'_{it} + \gamma (Asset turnover)'_{it}$  $+ \gamma (EPS)'_{it} + \varepsilon_{it}$ 

## Second Model:

#### **ESTIMATED MODEL:**

## Correlated Random Effects - Hausman Test <u>Table: 4.3.4</u>: Hausman Test

Correlated Random Effects - Hausman Test					
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.		
Cross-section random	13.88869	4	0.0077		

In Hausmen test p value is 0.007 which is less than 0.05 critical value. The results show that we will reject the Null hypothesis and accept the alternate hypothesis, which represents that random effect model is inappropriate and fixed effect model is appropriate.

#### Table: 4.3.4: Hausman Test

Cross-section random effects test comparisons:								
Variable	Fixed	Random	Var(Diff.)	Prob.				
ASSET_TURNOVER	20.86075	11.4291	8.923853	0.0016				
EPS	0.193831	0.450423	0.013197	0.0255				
PAYOUT_RATIO	-0.04225	-0.06528	0.000073	0.0072				
GEARING_RATIO	0.223172	0.271498	0.000317	0.0067				
Cross-section random effe	cts test equati	on:						
Variable	Coefficient	Std. Error	t-Statistic	Prob.				
С	7.639049	2.043903	3.737481	0.0003				
ASSET_TURNOVER	20.86075	3.882925	5.372431	0.0000				
EPS	0.193831	0.203895	0.950641	0.3445				
PAYOUT_RATIO	-0.04225	0.024494	-1.725067	0.0881				
GEARING_RATIO	0.223172	0.064964 3.435302		0.0009				
Effects Specification	Effects Specification							
Cross-section fixed (dumn	ny variables)							
R-squared	0.758196	Mean dep	endent var	14.5918				
Adjusted R-squared	0.721645	S.D. dependent var 8.496032						
S.E. of regression	4.482455	Akaike info criterion 5.967396						
Sum squared resid	1727.947	Schwarz criterion 6.3321		6.33212				
Log likelihood	-284.37	Hannan-Quinn criter. 6.11500						
F-statistic	20.74311	Durbin-Watson stat 1.060796						
Prob(F-statistic) 0.000000								

The value of R-Squared is 75.8196% which represents that ROE is changed by 75.8196% by independent variables and Adjusted R-squared value is 72.1645% indicates that 72.1645% error is existed by the external variables. The p value of overall model is 0.0000 which is less than 5% show the whole model is significant and ROE from the banks reveals that significant results, the value of Durbin Watson Statistics is 1.060796 which shows a positive correlation.

Dependent Variable: ROE							
Sample: 2007 2016							
Variable	Coefficient	Std. Error	t-Statistic	Prob.			
ASSET_TURNOVER	20.86075	3.882925	5.372431	0.000000			
EPS	0.193831	0.203895	0.950641	0.3445			
PAYOUT_RATIO	-0.042254	0.024494	-1.72506	0.0881			
GEARING_RATIO	0.223172	0.064964	3.435302	0.0009			
С	7.639049	2.043903	3.737481	0.0003			
Effects Specification							
Cross-section fixed (dummy	Cross-section fixed (dummy variables)						
R-squared	0.758196	Mean depen	ident var	14.5918			
Adjusted R-squared	0.721645	5 S.D. dependent var 8.496032					
S.E. of regression	4.482455	5 Akaike info criterion 5.967396					
Sum squared resid	m squared resid 1727.947 Schwarz criterion 6.33212						
Log likelihood	-284.3698	Hannan-Quinn criter. 6.115006					
F-statistic	20.74311	1 Durbin-Watson stat 1.060796					
Prob(F-statistic)	0.000000						

**TABLE No.: 4.3.5: Fixed Effect Model** 

The results after the hausman effect model is represents that the alternate hypothesis is accepted and null hypothesis is reject then fixed effect model is appropriate. The independent variable Asset turnover value is 0.000 which is less than p standard value 5% then Asset turnover is positive and significant impact in ROE. The gearing ratio is also p=0.0003 the value is less than 5% the results are positive and significant. But the payout ratio and EPS, the p > 5%, where the value of payout ratio is insignificant and negative impact on dependent variable. Where the EPS have a positive and insignificant impact on dependent variable. The overall model is significant and positive. The hausman effect test findings that the model is good, and its Durbin Watson value is 1.060796 which represent a good auto correlation between the dependent and independent variables. The F-Statistic value is 20.74311 and standard Error value is 4.482455. The overall results are positive and significant. The valye of R-Squared is 75.8196% which show that independent variable has a strong impact in dependent variables and

the value of Adjusted R-Squared represents that 72.14645% which show that the external factors are strongly impact on dependent variable. The error value is depend upon the adjusted R-Squared.

#### **Model Summary**

Model	R Square	Adjusted R Square	Std.ErroroftheEstimate	Durbin- Watson	Prob(F- statistic)
1	0.818060	0.790558	1.196433	0.624534	0.000000

In the present analysis, the data is collected for the period of 10 years starting from 2007 to2016. Estimation analysis according to the period is done to determine the difference in a variable in each year, in simple words the time effect on variables is taken into consideration. It provides information that about stages of variability in the estimation model and establish on the basis of the significance of test and variables. The significance of F Statistics is .000 if the value of significance remains less than 5% that means the model is significant here the model is highly significant because the value of probability is less than 5 % which is .000. According to (Ghazali - 2006) Alternative Hypothesis accepted if the level of significance is leaser 0.05. The consequences of the study area are same defined by Irwin and Cahaningrum in 2010.

By keeping the variation effect of different banks, belonging to different banking sectors as constant and only considering the time effect of data, the analysis gives the value of R square i.e. 81.8 percent and value of adjusted R square i.e. 79.05 percent. The value of Durbin Watson statistics is 0.624534.

#### **Model Summary**

Model	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin- Watson	Prob(F- statistic)
II	0.758196	0.721645	4.482455	1.060796	0.000000

By keeping the estimation effect of different banks, belonging to different banking sectors as constant and only considering the time effect of data, the analysis gives the value of R square i.e. 75.81 percent and value of adjusted R square i.e. 72.1645 percent. The value of Durbin Watson statistics is 1.060796.

The overall model is significant because the significant value is 0.000 which is less than 5%. The effect of ROE in the Islamic banking profitability is significant.

#### 4.4: Hypothesis Testing:

a. **T** – **TEST**:

T test fundamentally indicate that impact of variables to each other. (Ghozali, 2006). According to Ghozali shows a fundamental condition:  $H_0 > 5\%$  (Accepted and Sig.) OR

 $H_a < 5\%$  (Accepted and Sig.)

#### b. Testing F (Simultaneous)

This F Results define the influence of dependent and Independent variables. If F value is lesser 5% then the Alternative Hypothesis cannot reject this determine the independent variable affect the dependent variable (Ghozali, 2006)

#### **Conclusion and Recommendation**

#### Conclusion

From the previous research work, it is to be determined that the impact of profitability on the market size of Islamic banking in Pakistan is incongruous. Some researcher supports a negative association between them, while others such reported a positive association between them. Different parameters are used to measure the profitability of Islamic bank. The profitability ratios are used for measuring the growth and development of Islamic Banking. In the current analysis of the study, banks profitability is a relationship of Return on Asset and Equity. Independent ratios are Gearing Ratio, Payout Ratio, Asset Turnover, EPS; they directly impact on the profitability. The data for the study is collected from 2007 to 2016. The profitability determinants used to calculate banks performance by using these variables Return on Asset and Return on Equity. The estimation model explains that gearing ratio, Asset turnover, EPS are independent variable is positively related to ROA dependent variable Goddard, Molyneux and Wilson (2004). The first model clearly explains that the p value is greater than 5%. The analysis show the researcher will accept the Null hypothesis and reject the alternate hypothesis. The payout ratio is negatively correlated (Yusuf). It is to be concluded of market size of banks on profitability. Gearing ratio clarifies the productivity of the capital structure of a bank, if a bank depends on its value more than an obligation, it has an ability to expand its size as its exceptional liabilities are less and it has an adequate proprietor's value to back its advantages. This research offers the researcher and consultants both with insight to improve the financial and economic literature as concerns with the profitability of Islamic Banking. The research was neutralizing the impact of other external factors, and concentrating on the impact of a factor related to the bank directly.

#### **Recommendation**:

The recommendation specified in this study as follows:

- ROE and ROA measure the profitability and efficiency of capital employed and assets. The banks that want to enlarge their size should exceed their ROE and ROA.
- The focus of the study on the size and market capital of Islamic banks. Capital structure and leverage adjusted to expand the capital and market size of an Islamic bank's.
- Growth of Islamic Banking is through strategic management. An effective and efficient management can increase the sale volume, productivity of staff, and innovations in the field of banking.

#### **Limitation of Study**

- $\geq$ The study regulates Islamic banking profit and market size. Market size merely not only depend the profit of bank. Several internal and external because i.e. customer knowledge, management, political and economic structure can affect the profitability of Islamic banking.
- There are only Five Islamic banks are working in Pakistan. The total number of Islamic banks is 44, including 31 Pakistani, 9 public sector, 22 are domestic sector and 13 are foreign exchange. The sample size is 10 Islamic banks and windows of Islamic banking. The time period of study is ten years from 2007 to 2016. So, the results may be different for different sample size and for large time period.
- Islamic banking products are "Hilal" Riba (interest) free and have a positive growth over the years and show a positive growth in Islamic finance of Pakistan.



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