PROFITABILITY DETERMINANTS IN ISLAMIC BANKING INSTITUTIONS IN PAKISTAN

By

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Declaration of Authentication

I, hereby, declare that no portion of the work referred to in this thesis has been submitted in support of any application for another degree or qualification of this university or any other institution of learning.

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List of Tables

List of Figures

List of Appendices

List of Abbreviations

SBP	State Bank of Pakistan
IB	Islamic Bank
CB	Conventional Bank
ROA	Return on Assets
EPS	Earning Per Share
LR	Liquidity Ratio
DR	Deposit Ratio
CAR	Capital Adequacy Ratio
EM	Expense Management
BS	Bank Size
BN	Branch Network
GDP	Gross Domestic Product
INF	Inflation
LN	Log

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Abstract

Purpose-This research study is designed to investigate and identify the potential determinants from bank's internal environment and from macroeconomic environment that have a significant impact on profitability of full-fledged Islamic banking institutions operation in Pakistan.

Methodology/sample- Five full-fledged Islamic banks are selected for the study and five years panel data for the sample period of 2010 to 2014 from the secondary sources i.e. financial statements and SBP reports and publications. EPS and ROA are selected as dependent variable while LR, DR, CAR, EM, BS, BN GDP & INF are among the independent variables; two regression models are developed for each dependent variable. Least square method is used for testing the proposed hypothesis and other statistical tools are like descriptive statistics and correlation matrix are also applied.

Findings- The results revealed that EM and BS are statistically significant with EPS at 5% level of significance and have a positive relationship with the bank's profitability. GDP is negatively related but statistically significant with ROA at 5% level of significance. The research result suggested that Islamic banks of Pakistan need to increase the size by creating awareness and exploring new locations for establishing the branch network. Moreover, large bank size enables the Islamic banks to achieve economies of scale. Expense management is crucial for achieving the operational efficiency, the expansionary stage of the industry demands more expenditure for retaining the human capital and running the branch operations smoothly.

Practical Implications- This research will help the policy makers, bank managers and practitioners to control the impact of the variables and make decisions accordingly and can be used as reference for IBs for making policies and future researchers. Future researchers can include more critical variables, increase the sample size and add primary data in form of expert opinions for making the research results more appropriate.

Keywords: Profitability, EPS, ROA, Panel Data, Least Square Method, Islamic Banking, Pakistan

Table of Contents

CHAPTER 1: INTRODUCTION

The introductory chapter of this research discusses the fundamentals of the study in detail and highlights the important factors that determine the bank's profitability. This chapter encompasses an overview of Islamic banking industry, problem background, aim and significance of research, and chapter wise division of work.

1.1. Islamic Banking Industry Overview

Islamic banking emerged tremendously in Pakistan as a result of economic and religious need. Various efforts, measures and laws were introduced by the state government in the era of 1980s to eliminate interest from the economy. This was the first phase of finding the alternative of the interest based banking system, but due to various issues, this model was challenged in federal Shariah court and declared Non-Islamic. Islamic banking was re-launched in 2002 by the efforts of SBP and participation of Shariah board in making laws, regulations and policy framework based on the lessons learned from the past launch failure (SBP,2008).

Islamic banking has grown massively in almost every country of the world. Non-Muslims are also adopting it because of its appealing model of the interest free system. Islamic banking industry in Pakistan is in its expansionary stage and currently there are five full-fledged Islamic banks operation in Pakistan and 17 conventional banks with the Islamic window. So, according to a State bank of Pakistan report; Islamic banking industry possessed 10% market share with an asset base of about 1 trillion and increased profit of 3.95 billion (Zaidi, 2015 & SBP, 2014). Government of Pakistan is also supporting the Shariah compliant banking system in the country as IBs are recording a timely remarkable and efficient progress.

1.2. Problem Background

The main source of profit in conventional banks is interest, but how Islamic banks are earning profit as it is interest free? Islamic bank provides a variety of Shariah compliant product and services, aims to earn profit through investing into a profitable venture by undertaking the numerous trade activities and shares profit and loss equally. Profits earned by the Islamic banking industry in 2014 are among highest which about 15 billion rupees as of

December, 2014 and the earning indicators like ROA and ROE also spotted a remarkable improvement which is the witness of high profitability.

Islamic banking, despite its expansionary stage in Pakistan has grasped the interest of people as well as businesses in a very short time span and now growing rapidly that even conventional banks are also offering the Islamic products through their separate Islamic window. This research proposes to study the profitability of Islamic banks and to find that which factor of the internal and external environment of Islamic banks in Pakistan has a direct impact on the bank's performance and growth. These are some critical factors that motivated the researcher to conduct this study, although some important studies have already been conducted in this respect, but this research is proposed to update the literature as well as identify the trends regarding the profitability determinants and explore more about the factors in detail and find out the difference in profitability with the economic hitches between the periods of 2010 to 2014.

1.3. Objectives of Research

- The main objective of this research study aims to focus on the important determinants both internal and external that can affect the profitability of Islamic banking institutions operating in Pakistan.
- This research will help the practitioner’s and policy makers to look closely to the facts and figures and make decisions accordingly.
- To fill the knowledge gap found in the past studies and update the literature on Islamic banking industry of Pakistan.
- Identify the potential determinants from bank’s internal environment and from macroeconomic environment that have a significant impact on profitability as per the prevailing industry conditions.

1.4. Significance of Research

The remarkable growth of Islamic banking industry can be seen so, the various studies and researches are very important in this regard that helps to improve the bank’s performance, operations and management decision making that will help Islamic banking industry to grow

more and contribute to the economic development and survive in the competitive environment of commercial banks.

The efforts by banking industry to attract customer, boost up the sales, increase profits are useless if the management failed to manage the funds properly and identified the internal and external variable that have a direct impact on the bank's profitability. Based on the previous studies, in depth analysis of the variables have been done that have a significant impact on the bank's profitability. Hence, this study will help the policy makers, bank managers and practitioners to control the impact of the variables and make decisions accordingly. Further, this research can be used as reference for IBs for making policies and future researchers.

1.5. Organization of Thesis

Chapter 1, current chapter constitutes the problem background, aim of the research, research significance and introduction to the organization/sector over which the research is being conducted and organization of the thesis.

Chapter 2 is based on past researches and literature found on the profitability determinants of Islamic banking institutions, which enhance the authenticity of this research and provides the supporting evidence of research variables according to the facts found by expert researchers, academicians' and practitioners' on the subject matter.

Chapter 3 will provide information on research methodology – nature and kind of research, sample size, sampling method, data collection methods employed during the study, kind of data collected, and the way the data is integrated.

Chapter 4 will comprise the research data integration and analysis as well as findings of the data and their interpretation.

Chapter 5 will comprise a critical debate on the study drawings in the light of literature and past studies and contrasting it with the findings of this study.

Chapter 6 will constitute conclusions, recommendations and limitations of the study.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

In this chapter in depth analysis of previous research studies have been conducted by the researcher for enhancing the authenticity as well as reliability of this study. This chapter will contribute to the significance of the study and helps the researcher to generate hypotheses and identify the key dependent and independent variables on the basis of empirical research findings.

2.2. Previous Research Studies

A research study was conducted on 15 commercial banks of Pakistan and data collected for the period of 5 years from 2005-2009 for examining the effect of macroeconomic and bank's internal variable on the profitability by using the ordinary least square test and the results provides the indication that banks with more assets, loans, deposits and capital will earn more profit and micro and macroeconomic variables are significantly related with the profitability (Gul, Irshad & Zaman, 2011).

Rozzani & Rahman in 2013 in order to explore about the banking efficiency of conventional and Islamic banks of Malaysia conducted a study in which data from 2008-2011 is analyzed for the research sample selected i.e. 16 Islamic and 19 conventional banks and uses stochastic frontier analysis for data analysis. On the whole, the efficiency of Malaysian banks is almost similar, the result also suggests that the performance of conventional banks will be improved with the decrease in credit risk and operating cost and with the increases in bank size while in case of Islamic banks operational cost need to be controlled for improving the efficiency.

Another research study, which was conducted in 2014 on religious aspects of finance promises as evidence from Pakistan compares the commercial and Islamic banks performance operating in Pakistan. The poison distribution method was applied to the 2012 data. ROE, ROA, EPS, total assets, market share and capital adequacy ratios are the main research variables and the z-score result suggest that there is a positive coefficient of market share, equity and ROE of Islamic banks; thus they are more stable and perform efficiently as

compared to commercial banks and its credit performance is also better since, the credit risk exposure is low in Islamic banking industry (Bukhari, Nawaz, Imam & Qadri, 2014).

Eltabakh, Ngamkroeckjoti & Siad (2014) for identifying the profitability determinants before, after and during the global financial crises, conducted a comparative study of Islamic and conventional banks listed in Qatar exchange. Nine years data from 2005 to 2012 were collected and correlation coefficient analysis and T-test were applied in this research for studying the relationship between the variables and identifying the differences between the profitability of Islamic and conventional banks. The research results revealed that there is a significant relationship between the independent and dependent variables, but bank size, debt to equity, debt to asset, inflation and money supply are negatively related the profitability of Islamic banks while conventional bank's profitability are positively related with the above stated variables except inflation, debt to equity, non-performance loans and interest rate.

A research study was conducted for assessing the effect of the financial environment of various countries on bank's specific characteristics and overall performance of Islamic banks. The data collected for this study are from 21 countries, Islamic banks during the period of 1994 to 2001 and for predicting the Islamic banks' efficiency and a large variety of internal and variables were used. The study includes some macroeconomic variables like GDP, inflation, real interest and performance indicators of banks, i.e. profitability, asset quality, liquidity, capital and operational efficiency ratios. The regression analysis and estimation technique were used by the researchers for data analysis and the results shows that profitability and overhead are positively related with each other while taxation can affect the bank's performance negatively. Thus, the performance is positively affected by the favorable macroeconomic conditions of the country (Hassan & Bashir, 2003).

Khan, Farooq & Fawad (2011) compares the performance of conventional and Islamic banks in Pakistan in order to identify that which banking system is more efficient. The sample selected for the study is two conventional and two Islamic banks and financial ratio analysis technique were applied to the data collected for the period of 2006 to 2009. Profitability, solvency and liquidity ratios were used in this study and the research findings suggest that Islamic banks performance is efficient and satisfactory in the banking industry and are

earning more profit as compared to conventional banks, but they are better because of more equity financing, thus less risk of going default and are cost efficient as well.

For the stability of the banking system, profitability plays a crucial role. The study concludes that there is a direct positive relationship found between the profitability and bank size. Hence, bank size considered to be important factors which influence the business and attracts customers as well a new ultimately results in a profitable venture. The profitability of any bank can be influenced or determined by the various factors including external and internal factors (Idris, et al, 2011).

Muda, Shaharuddin & Embaya (2013) conducted a research that involves the profitability determinants comparative analysis of foreign and domestic Islamic banks operating in Malaysia and used quarterly from 2007 to 2010 for 17 Islamic banks. The study variables were tested by using Generalized Least Square (GLS) technique and determinants of profitability for foreign and domestic banks are different concludes that domestic bank's profitability are affected by GDP overhead, bank size, expense ratio, loans ratio, technical efficiency and no effect on foreign banks whereas, inflation, deposit ratio and capital reserve have a significant impact on both banks profitability. GDP has a direct and statistically significant impact on foreign banks. The global financial crisis has an adverse impact on the domestic banks operating in Malaysia so they need to take such initiatives that not only strengthen their ability to manage risk but can also ready to meet any kind of sudden financial shock.

Various researches applied a regression model and by identifying the profitability measures like Return on Assets (ROA), Return on Equity (ROE) and earnings per Share (EPS), moreover return on deposits, net interest margin and profit margin are also considered as the profitability measures. Literature found on the bank’s profitability depends on the several internal and external factors (Muda, Shaharuddin & Embaya, 2013). Thus, all the profitability ratios that determine the earning potential of any bank are used by the various researchers in their studies.

Islamic banks are not highly affected by the liquidity crisis in Pakistan in 2008 as compared to conventional banks; SBP controlled the panic created by the crisis within a few months with the introduction of various measures that promotes the banking sector solvency but

liquidity as well. The banks pattern of lending was changed due to deposit withdrawals, but is more applicable in the case of conventional banks as Islamic banking institutions continued to provide credit (Zaheer & Farooq, 2014).

The literature supports the fact that Capital Adequacy is positively related with the Islamic bank profitability as State Bank of Pakistan (SBP) is now tightening its policies and prudential regulations (Akhtar, Ali & Sadaqat, 2011). Capital to finance ratios is crucial in contributing to the success of Islamic banks and helps the bank to reserve an adequate amount in order to meet the emergency funding need (Shaikh, 2013). Hasan (2003) explicates that there is weak empirical evidence found that capital ratios have a significant impact on Islamic bank's performance because these banks are heavily focused on the trade financing of less than one year thus results in a low risk loan profile.

Although a large number of research studies suggested and concluded a profit and efficiency of the bank is directly related to its size. Evidence depicts in various researches that large banks are more prone to raise less expensive capital, which ultimately results in higher profits. Thus, an increase in bank size also benefits in the form of little cost saving (Athanasoglou, Brissimis and Delis, 2008).

The operating expense ratio measures the quality of bank management that how efficiently they are taking decisions to run the daily banking operation, a research study reveals the Islamic banks operating ratio is about 1.37% in 2005 which means an efficient management effort, but after in 2006 the ratio has been increased due to various reasons but after this ratio for Islamic banks improved year by year (Jaffar& Manarvi, 2011).

In order to examine the specific profitability factors of the bank and its impact on the profitability Akhtar, Ali & Sadaqat (2011) used multivariate regression model on the financial data for the period of 2006 to 2009 of Islamic banks operating in Pakistan. ROA and ROE used as the dependent variable and as a proxy for measuring the bank's profitability while gearing ratio, Non Performance loans (NPL) ratio, bank size, operational efficiency and capital adequacy were selected as independent variables by the researchers. The statistical evidence depicts that asset management, gearing ratio. Capital adequacy is positively related with ROA and ROE whereas, NPL and bank size are negatively related to the profitability of Islamic banks. The researchers conducted this research for giving an

insight of Islamic banking industry to the policy makers or practitioners as well as with the aim of contributing in economic and financial literature for future studies.

Awan (2009) for comparing Islamic and conventional banking in Pakistan analyses the data from 2006 to 2009 and selected six Islamic and six conventional banks. The Islamic banks vertical growth was analyzed by doing ratio analysis for measuring the performance indicators. Comparative analysis technique, direct interviews and ratio analysis were applied on the financial indicators, i.e. liquidity, asset quality, capital adequacy and earnings. These indicators were measured by various proxies and the study results suggested that Islamic bank's performance is better in comparison with those of conventional banks in terms of service quality, assets, deposits, efficiency, loan recovery, and investments and financing. Thus, the study results predict the future success of Islamic banking industry in Pakistan as well.

Research study on Gauging profitability and liquidity of Islamic banks with the aim to assess, analyses and compares the financial performance of five Malaysian Islamic banks with five Islamic banks operating in Pakistan for the period of 2006 to 2011 by using ratio analysis technique with descriptive and inferential statistics for the data analysis. Empirical results reveal that Malaysian banks more liquid and profitable while no major difference is identified in Current ratio, ROA, ROE, cash and portfolio investment to deposit and loan to deposit ratio. This research also portrayed that both country's banks faced losses initially, but the tight and efficient policies and its implication progressed the banking operations. Malaysian banks are efficient in maintaining the investment portfolios while Pakistani banks in high loan to deposit ratio (Khan, Ali& Khan, 2015).

In the end, the researchers discuss the factual position of Malaysian and Pakistani Islamic banks and what measures can be taken to improve the performance and profitability. Malaysian banks are supported by the government, thus, have higher yield as compared to Pakistani Islamic banks, which are in private sector that's why they hinders to take more risk and formulate the profitable policies.

Ahmad & Noor (2011) for filling the demanding gap of literature and analyzing the main determinants of profitability and efficiency of world Islamic banks for the sample years from 1992 to 2009, total 78 banks were selected from 25 countries and data employment analysis

and ordinary least square techniques was applied by the researchers on various internal and external factors. The research results shows that that banks with high operating expense ratio are more profitable and concludes that operating expense ratio, bank size, equity, NPL and GDP are proved to be significant and positively related with profitability of bank, while loans ratio are negatively related with bank's efficiency and profitability.

ALTaleb & ALKhatib (2015) used EPS as dependent variable for measuring the banking operations of Islamic banks operating in Jordan during 2000 to 2013 and took financial and economic factors as independent variables of the study i.e. Unemployment rate, GNI, GDP, Inflation, ROA, ROE, Book value, liquidity and debt ratio. Descriptive statistics, correlation matrix and Anova was the main statistical tools used in the research and the findings reveals that EPS have a positive and significant impact on ROE and book value per share, while inflation and GDP are positively insignificant and the other variables like in ROA, liquidity and debt ratio and unemployment rate are negatively insignificant with EPS of Islamic banks.

The good corporate governance indicates the bank performance for measuring the performance of Nigerian banks researcher uses ROE, EPS and ROCE as the performance indicators while Capital adequacy ratio (CAR), interest rate and loan to deposit ratio (LDR). Researchers concluded that CAR and LDR are statistically insignificant in explaining all three dependent variables. Bank performance is negatively impacted by LDR and positively by CAR while interest rate has an inverse relationship with all three performance indicators (Omoniyi & IO, 2013 and Mukolu & Ogodor, 2014).

2.3. Conclusion

In the above literature review, all the discussion is based on the past empirical studies results and discussion provides the authentic evidence regarding the profitability of Islamic banks and reveals that how various bank's specific characteristics or internal and external variables like liquidity, deposit structure, expense management, credit rating, GDP, etc. and for testing the relationship and impact. Various researchers used different research strategies and statistical test for proving the significance between the variable. So, on the basis of the above discussion and conclusion of this chapter, researcher generated the hypothesis and selects the research process to conduct this study in the next chapter.

CHAPTER 3: RESEARCH METHODOLOGY

This section covers the research processes adopted by the researcher in conducting this study, including sample size, data collection sources and methods and how the collected data will be integrated in the analysis of the research results.

3.1. Natures of Research

There are three types of researches that can be applied to the research study, which includes cause and effect (explanatory and experimental study), exploratory and descriptive research (Burns and Bush, 2007). This research study falls under the category of explanatory research which includes the quantitative data. Hypotheses are generated are based on the past researches and literature. Independent and dependent variables will be tested, which explains the cause and effect relationship between the variables.

The research approach will be deductive as the hypothesis will be generated which will be accepted or rejected after applying the various statistical test and data analysis.

3.2. Sampling Technique and Sample Size

There are two types of sampling techniques, probability and non-probability sampling can be used in any research study (Cooper, Schindler & Sun, 2006). In this research study, the non-probability sampling technique is used. The target population is the banking industry in Pakistan and sample is full fledge five Islamic banks (Meezan Bank Ltd, Bank Islami Ltd, Dubai Islamic Bank Ltd, Burj Bank Ltd, Albarkah Bank) and this study uses panel data for the five years period from 2010 to 2014 for testing the significance between the profitability and bank's internal and external variables.

3.3. Data Collection Method

There are two types of quantitative and qualitative data and can be collected from the two main sources which are primary and secondary. This research is based on the quantitative data that is collected from secondary sources. Secondary data collected for this research are from the annual reports, financial statements of the banks, Pakistan Bureau of Statistics (PBS) and State Bank of Pakistan (SBP) published reports and the Islamic banking bulletin.

3.4. Data Integration Method

For analyzing the collected data and testing the proposed hypothesis; Eviews is used in this research study. Descriptive statistics analysis is used by the researcher for examining and comparing the financial position of Islamic banks and overall performance of the Islamic banking industry of Pakistan. Correlation matrix is also developed for assessing the relationship between independent variables. Furthermore, Regression analysis technique is used by the researcher to check the relationship and for test the level of significance between dependent and independent variables by using Eviews.

3.5. Research Framework

The subsequent figure illustrate the conceptual framework, which is designed for the research study on the basis of the above literature, internal variables and external i.e macroeconomic variables is reflecting that it have a positive or negative impact of on the profitability of IBs.

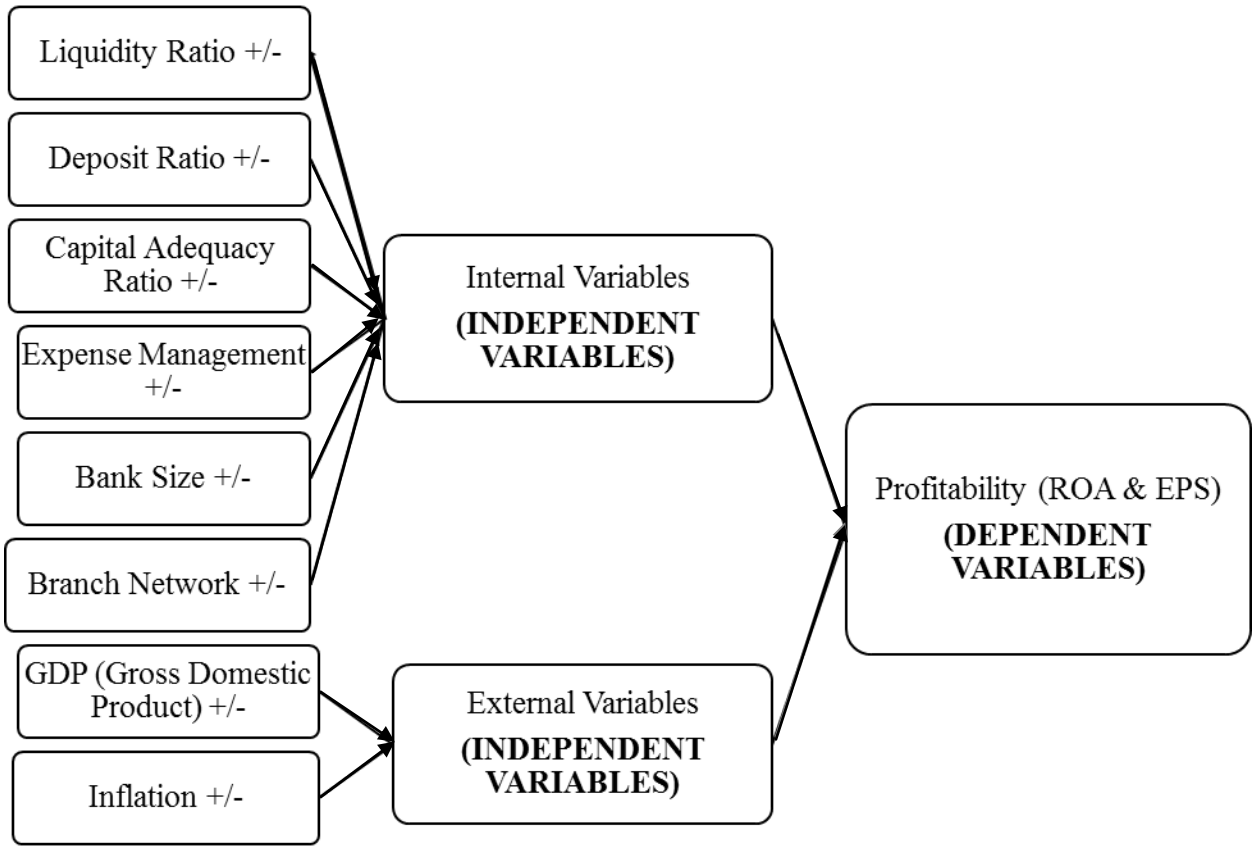

Figure 1: Conceptual Framework

3.6. Research Variables and Hypothesis

On the basis of the previous researches and literature review various variables are identified and the following hypothesis is proposed for this research study:

3.6.1. Return on Assets (ROA)

ROA shows the ability of the bank's management in utilizing the financial resources of the bank in such a way that results in generating higher profits and simultaneously improves the performance. ROA can be calculated as dividing Net Profit with Total Assets. Several regulators and experts believe that the in order to measure the efficiency of any bank, ROA is one the best measure to depict the correct status of a bank's performance (Hassan & Bashir, 2003 and Jan & Marimuthu, 2015).

This ratio is commonly used in various researches as a proxy to measure the bank's profitability and for evaluating the business performance. It is extensively observed that ROA of Islamic banks is higher as compared to conventional banks. Thus, ROA is considered as one of the important tools that indicates the operational efficiency of the bank (Cook and Uchida, 2004).

3.6.2. Earnings per Share (EPS)

Earnings per share can be calculated by dividing the net income available to the shareholders with the no. of shares outstanding. A study conducted for comparing the profitability and liquidity of Islamic banks in Pakistan and Malaysia and its empirical results provides the evidence that the Malaysian banks are more profitable means higher EPS as well as compared to the IBs operating in Pakistan (Khan, Ali& Khan, 2015).

3.6.3. Liquidity Ratio

Liquidity ratios refer to the ability of a firm to pay off its short term obligations thus, higher the liquidity ratios higher will be the safety level for the company, less risk of going into default. A Study was conducted for investigating the factors affecting the world Islamic banks profitability in its results postulates that profits are not related to the liquidity (Ahmad & Noor, 2011 and Moin, 2008). There is no significant relationship found between liquidity and ROA (Idris, et al, 2011). While as per Eltabakh, Ngamkroeckjoti & Siad (2014) there is

positive relationship between liquidity and profitability before and after the global financial crisis, researcher used loan deposit ratio for evaluating the liquidity structure.

H1: Liquidity is positively/negatively related to Profitability of Islamic Banks.

3.6.4. Deposit Ratio

Since deposits are the main source of funding so banks heavily rely on it and have a significant impact on profitability. Deposit ratio can by calculated by dividing total deposit with total assets of bank (Muda, Shaharuddin & Embaya, 2013). Deposit structure is an internal variable that shows the deposit ratio in various accounts offered by a bank i.e. current, saving and investment. Impact of deposit structure of a bank is positively related with the ROA (Khan, Farooq & Fawad, 2011). Abbas (2013) found inverse relationship between deposits and profitability.

H2: Deposit ratio is positively/ negatively related to Profitability of Islamic Banks.

3.6.5. Capital Adequacy

Capital Adequacy refers to the measure of a bank's capital and expressed as a percentage of a bank's risk weighted credit exposures. The high ratio of capital adequacy of a bank shows the level of reliance on the capital of expanding the banking business or operations, simultaneously financial institutions are liable to meet the minimum capital requirement imposed by the state bank of Pakistan for dealing with any kind of crisis conditions, cover the possible risks like credit, operational and market risk and avoid the potential losses (Awan, 2009). Eltabakh, Ngamkroeckjoti, & Siad, (2014) concludes statistically insignificant and negative relationship after the global financial crisis between profitability and CAR of Islamic banks but negative and significant during the crisis. According to Idris, et al (2011) there is insignificant relationship between CAR and ROA. Another study suggests that there is positive significant relationship found between profitability and CAR (Akhtar, Ali & Sadaqat, 2011).

H3: Capital Adequacy is positively/negatively related to Profitability of Islamic Banks.

3.6.6. Expense Management

Expense management is among the most critical factors contributing in the profitability of a bank as the cost saving can also be done if the operating expenses is controlled by following

the budget. Poor expense management shows the poor performance of management and results in lower profit. The previous researchers conclude that there is a direct relationship between the bank's profit and operating expense. Some researchers have observed the positive relationship while another found that the two variables are negatively related with each other (Idris, et al, 2011). Operational efficiency is positively significant with ROA (Akhtar, Ali & Sadaqat, 2011).

H4: Expense Management is positively/negatively related to Profitability of Islamic Banks.

3.6.7. Bank Size

Bank size is one of the important determinants of Islamic banks profitability. If the size is larger than it is easy to create economies of scale by reducing the cost and thus, impacts positively on bank's profitability (Almazari, 2014). According to Haron (2004), Muda, Shaharuddin & Embaya (2013) and Idris, et al (2011) there is a considerable and significant positive relationship found between the bank size and profitability. Another research finding concluded that bank size has significantly negative relationship this means that the total assets of small Islamic banks are generating more profit as compared to the large banks (Eltabakh, Ngamkroeckjoti, & Siad, 2014).

H5: Bank Size is positively/ negatively related to Profitability of Islamic Banks.

3.6.8. Branch Network

Branch network can be used as a proxy of measuring size and market share of banks, Market share can be measured by using the total assets, branch network of a bank and total deposits while Net Financing Investment is another indicator of Islamic banking industry growth (SBP, 2008 & Saeed, 2011). It refers to the number of branches operating in a country. Mahmood (2014) and expected to have a direct impact on the bank's profitability as the expansion of banks will not only maximize the profit but also expand the no. of branches that ultimately results in growth in banking business. High market share of a bank depicts the technical efficiency of the specific bank and its external performance as well (Al-Sayed, 2012).

Log on no. of branches used as a proxy to measure the effect of branch network on the profitability of Islamic banks (Zaheer & Farooq, 2014). According to Djoundourian & Raad

(2008) found that if no. of branches increased the overall efficiency of the banks tends to decreased. Branch network also depicts the competition between the banks and expected to have a direct relationship with the profitability of bank (Teng, 2012).

H6: Branch network is positively/ negatively related to Profitability of Islamic Banks.

3.6.9. Gross Domestic Product (GDP)

The GDP growth rate of any country can directly affect the bank's profitability as per the prevailing economic conditions; supply and demand of loan and deposits are affected by the increase and decrease in the growth rate of GDP. Mahmood (2014) used GDP for measuring the economic condition of the country and its impact on the bank's profitability in Pakistan; the research findings show the insignificant relationship between these two variables. The GDP growth rate shows the economic output that how the economic growth impacts the banking services demand and expected to positively relate to profitability of banks. Another study on the profitability of banks in GCC regions concludes a positive and significant relationship between GDP and profit (Zeitun, 2012). Ariffin & Tafri (2014) research findings shows a negative relationship which means GDP of a country not have a significant impact on the profitability of Islamic bank.

A study conducted on the profitability of 16 Islamic banks operating in Malaysia and the research findings shows that there is positive relationship between profitability and the macroeconomic variables i.e. Inflation rate and GDP (Wasiuzzaman & Tarmizi, 2010). Negative relationship between GDP and profitability found in various studies as well (Sufian, 2011, Khrawish, 2011 and Staikouras & Wood, 2011).

H7: GDP is positively/ negatively related to Profitability of Islamic Banks.

3.6.10. Inflation Rate

Inflation can be described as the increase in the prices of the consumer goods and price level can be measured change in the Consumer Price Index (CPI) on an annual basis. The research findings show that inflation rate is negatively related with the ROA. Higher the inflation, higher will be asset price, exchange rate and operating cost of the bank. So, at this point an indirect relationship founded, increased at an inflation rate decreases the net profit of the bank and Consumer Price Index (CPI) used as a measure of the inflation rate by the

researcher (Mahmood, 2014). Molyneux and Thornton (1992), Bourke (1989) and Haron (2004) research studies found a significant positive relationship between inflation and the bank's profitability (Haron, 2004).

H8: Inflation rate is positively/ negatively related to Profitability of Islamic Banks.

3.7. Research Model

As this research study measures the profitability from three proxies so, he following three models is developed by the researcher to achieving the aim of this study:

Model 1: $ROA\ (Y1) = \alpha + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + \ln X_5\beta_5 + \ln X_6\beta_6 + X_7\beta_7 + X_8\beta_8 + €$

Model 2: $EPS\ (Y2) = \alpha + X_1\beta_1 + X_2\beta_2 + X_3\beta_3 + X_4\beta_4 + \ln X_5\beta_5 + \ln X_6\beta_6 + X_7\beta_7 + X_8\beta_8 + €$

Where;

α = Constant

β = Coefficient for independent variables

€ = Error term

The following table represents the research variable with proxies and symbols:

Table 1: Research Variables and Proxies

S.No.	Variables	Symbols	Proxies
Profitability			
1	Return on Assets	Y1 - ROA	= Net income /Total Assets
2	Earnings Per Share	Y2 - EPS	= Net income available to the shareholders / No. of shares outstanding
Internal Variables			
3	Liquidity Ratio	X1 - LR	= Advances/ Total Assets
4	Deposit Ratio	X2 - DR	= Total Deposits /Total Assets
5	Capital Adequacy Ratio	X3 - CAR	= Bank's capital / Bank's risk weighted credit exposures
6	Expense Management	X4 - EM	= Expense/ Total Assets

7	Bank Size	X5 - BS	= Log of Total Assets
8	Branch Network	X6 - BN	= Log of No. of Branches
External Variables			
9	Gross Domestic Product	X7 - GDP	=GDP growth rate
10	Inflation	X8 - INF	= Consumer Price Index (CPI)

3.8. Conclusion

The research methodology for the study is selected on the basis of the previous researches. This study is explanatory research which is based on quantitative data collected from the secondary sources i.e. financial statements of Islamic banks and SBP reports publications by using the non-probability sampling technique and deductive research approach. Regression models are created for testing the proposed hypothesis and prove the significance between the dependent and independent variables and descriptive statistics is also used in the research study.

CHAPTER 4: DATA INTEGRATION AND ANALYSIS

4.1. Introduction:

In the previous chapter hypothesis development and methodology for moving forward in the research study were decided. This chapter aims to proceed with the data collected by the researcher by doing data analysis through running panel least squares regression on E-views an covers the interpretation of results of the two models, descriptive statistics and correlation matrix. This study selected two dependent variables and created two regression models for testing the hypothesis, below given are the results and interpretation of the models.

4.2. Research Results

Table 2: Model 1

Dependent Variable: EPS
Method: Panel Least Squares
Sample: 2010 2014
Cross-sections included: 5
Total panel (balanced) observations: 25

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-40.02657	11.28952	-3.545464	0.0027
LR	0.181339	2.144989	0.084541	0.9337
DR	-2.473139	6.053627	-0.408538	0.6883
CAR	5.567278	3.392108	1.641244	0.1203
EM	38.14789	17.61933	2.165116	0.0458
BS	2.221507	0.572980	3.877113	0.0013
BN	1.182020	0.662768	1.783458	0.0935
GDP	-158.3523	75.64757	-2.093290	0.0526
INF	5.136047	5.198307	0.988023	0.3378

R-squared	0.936427	Mean dependent var	0.765080
Adjusted R-squared	0.904640	S.D. dependent var	1.713831
S.E. of regression	0.529237	Akaike info criterion	1.838953
Sum squared resid	4.481472	Schwarz criterion	2.277748
Log likelihood	-13.98691	Hannan-Quinn criter.	1.960656
F-statistic	29.45984	Durbin-Watson stat	3.080834
Prob(F-statistic)	0.000000		

EPS = -40.02657 + 0.181339*LR - 2.473139*DR + 5.567278*CAR + 38.14789*EM + 2.221507*BS + 1.182020*BN - 158.3523*GDP + 5.136047*INF

Table 3: Model 2

Dependent Variable: ROA
Method: Panel Least Squares
Date: 10/25/15 Time: 17:03
Sample: 2010 2014
Cross-sections included: 5
Total panel (balanced) observations: 25

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.237645	0.158535	-1.499013	0.1533
LR	0.059764	0.030121	1.984099	0.0647
DR	0.168722	0.085009	1.984755	0.0646
CAR	0.059935	0.047634	1.258231	0.2264
EM	0.072759	0.247422	0.294070	0.7725
BS	0.006235	0.008046	0.774855	0.4497
BN	0.009114	0.009307	0.979228	0.3420
GDP	-2.524291	1.062292	-2.376268	0.0303
INF	-0.004662	0.072998	-0.063864	0.9499

R-squared	0.727804	Mean dependent var	0.000112
Adjusted R-squared	0.591707	S.D. dependent var	0.011631
S.E. of regression	0.007432	Akaike info criterion	6.692360
Sum squared resid	0.000884	Schwarz criterion	6.253565
Log likelihood	92.65450	Hannan-Quinn criter.	6.570657
F-statistic	5.347659	Durbin-Watson stat	2.943377
Prob(F-statistic)	0.002174		

ROA = -0.237645 + 0.059764*LR + 0.168722*DR + 0.059935*CAR + 0.072759*EM + 0.006235*BS + 0.009114*BN - 2.524291*GDP - 0.004662*INF

4.2.1. F-statistics

The assumption behind interpreting F-statistics is that the level of significance is 5% so, Ho will be accepted if the f-test value is less than 0.05 reject Ho and if greater than 0.05 then failed to reject Ho.

As per the regression result of model 1 **Prob(F-statistic) is 0.000000** which is < 0.05, it means that we reject Ho and concludes that at least one or more independent variables used in this study is important in explaining the EPS i.e. dependent variable and overall model is significant.

Model 2 regression result shows the **Prob(F-statistic) is 0.002174** which is < 0.05, it means that we reject Ho and concludes that at least one or more independent variables used in this study is important in explaining the ROA i.e. dependent variable and overall model is significant.

4.2.2. The Coefficient of Determination and Adjusted R^2

R^2= 0.936427 this means that there is **93.6427%** variation in EPS of Islamic Banks because of the independent variables in the model. Hence, there is a strong relationship between dependent and independent variables.

R^2= 0.727804 this means that there is **72.7804%** variation in ROA of Islamic Banks because of the independent variables in the model. Hence, there is a moderate relationship between dependent and independent variables.

Adjusted R^2= 0.904640 this means that there is **90.4640%** of total variation in EPS because of independent variables explained by regression rather than **93.6427%.**

Adjusted R^2= 0.591707 this means that there is **59.1707%** of total variation in ROA because of independent variables explained by regression rather than **72.7804%.**

4.2.3. T-Statistics

If p-value is less than 0.05 so reject null hypotheses and if p value is greater than 0.05 failed to reject null hypotheses.

4.2.3.1. Liquidity Ratio

Failed to reject Ho, as the probability of t-statistics is 0.9337 which is greater than 0.05 significance level and concludes that liquidity ratio have a positive but statistically insignificant impact on EPS in model 1. As per model 2 results Failed to reject Ho, as the probability of t-statistics is 0.0647 which is greater than 0.05 significance level and concludes that liquidity ratio have a positive but statistically insignificant impact on ROA.

4.2.3.2. Deposit Ratio

Failed to reject Ho, as the probability of t-statistics is 0.6883 which is greater than 0.05 significance level and concludes that deposit ratio have a negative and statistically insignificant impact on EPS in model 1. As per model 2 results Failed to reject Ho, as the probability of t-statistics is 0.0646 which is greater than 0.05 significance level and concludes that deposit ratio have a positive and statistically insignificant impact on ROA.

4.2.3.3. Capital Adequacy

Failed to reject Ho, as the probability of t-statistics is 0.1203 which is greater than 0.05 significance level and concludes that Capital Adequacy have a positive but statistically insignificant impact on EPS in model 1. As per model 2 results Failed to reject Ho, as the probability of t-statistics is 0.2264 which is greater than 0.05 significance level and concludes that Capital Adequacy have a positive but statistically insignificant impact on ROA.

4.2.3.4. Expense Management

Reject Ho, as the probability of t-statistics is 0.0458 which is less than 5% significance level and concludes that Expense Management have a positive and statistically significant impact on EPS. The results indicate that for every 1 unit increase in Expense Management, EPS can be increased by 38.14789 (the estimated coefficient of Expense Management), other things remain constant in model 1. While, as per model 2 results Failed to reject Ho, as the probability of t-statistics is 0.7725 which is greater than 0.05 significance level and concludes that Expense Management have a positive but statistically insignificant impact on ROA.

4.2.3.5. Bank Size

Reject Ho, as the probability of t-statistics is 0.0013 which is less than 5% significance level and concludes that bank size have a positive and statistically significant impact on EPS. The results indicate that for every 1 percent increase in bank size, EPS can be increased by 2.221507 (the estimated coefficient of bank size), other things remain constant in model 1. While, as per model 2 results Failed to reject Ho, as the probability of t-statistics is 0.4497 which is greater than 0.05 significance level and concludes that bank size have a positive but statistically insignificant impact on ROA.

4.2.3.6. Branch Network

Failed to reject Ho, as the probability of t-statistics is 0.0935 which is greater than 0.05 significance level and concludes that Branch Network have a positive but statistically insignificant impact on EPS in model 1. while, as per model 2 results Failed to reject Ho, as the probability of t-statistics is 0.3420 which is greater than 0.05 significance level and concludes that Branch Network have a positive but statistically insignificant impact on ROA.

4.2.3.7. Gross Domestic Product (GDP)

Failed to reject Ho, as the probability of t-statistics is 0.0526 which is greater than 5% significance level and concludes that GDP has a negative but statistically insignificant impact on EPS in model 1. While, as per model 2 results Reject Ho, as the probability of t-statistics is 0.0303 which is less than 5% significance level and concludes that GDP have a negative but statistically significant impact on ROA. The results indicate that for every 1 unit increase in GDP, ROA can be decreased by 2.221507 (the estimated coefficient of GDP), other things remain constant.

4.2.3.8. Inflation Rate

Failed to reject Ho, as the probability of t-statistics is 0.3378 which is greater than 0.05 significance level and concludes that Inflation rate have a positive but statistically insignificant impact on EPS in model 1. While, as per model 2 results failed to reject Ho, as the probability of t-statistics is 0.9499 which is greater than 0.05 significance level and concludes that Inflation rate have a negative but statistically insignificant impact on ROA.

4.3. Descriptive statistics

The below given table showing the descriptive statistics summary of profitability and its determinants all fully fledged Islamic banks operating in Pakistan and macro-economic variables for the 5 year of sample period from the year 2010 to 2014:

Table 4: Descriptive Statistics

DESCRIPTIVE STATISTICS										
	ROA	**EPS**	**LR**	**DR**	**CAR**	**EM**	**BS**	**BN**	**GDP**	**INF**
Mean	0.000112	0.765080	0.441616	0.827844	0.180872	0.036888	18.17962	4.794308	0.039000	0.091000
Median	0.002100	0.280000	0.421800	0.847000	0.153700	0.034200	18.11780	4.625000	0.038400	0.086000
Maximum	0.016900	4.560000	0.586200	0.885700	0.418100	0.067100	19.89600	6.059100	0.042000	0.137000
Minimum	-0.030300	-1.390000	0.317700	0.714900	0.112000	0.024600	16.68800	3.912000	0.036200	0.048000
Std. Dev.	0.011631	1.713831	0.080181	0.045800	0.073597	0.011495	0.756585	0.625115	0.002370	0.031091
Skewness	-1.041552	1.124561	0.566751	-1.036515	2.184850	0.943928	0.515969	0.412608	0.170216	0.139018
Kurtosis	3.433203	3.117054	2.355268	3.090390	7.354007	3.069761	3.105632	2.175442	1.319220	1.883622
Jarque-Bera	4.715613	5.283599	1.771361	4.485022	39.63715	3.717571	1.120891	1.417579	3.063453	1.378755
Probability	0.094628	0.071233	0.412433	0.106192	0.000000	0.155862	0.570955	0.492240	0.216162	0.501888
Sum	0.002800	19.12700	11.04040	20.69610	4.521800	0.922200	454.4906	119.8577	0.975000	2.275000
Sum Sq. Dev.	0.003247	70.49319	0.154295	0.050343	0.129996	0.003171	13.73812	9.378454	0.000135	0.023200
Observations	25	25	25	25	25	25	25	25	25	25

On average the mean of profitability variables i.e. ROA is 0.0112% and EPS is 0.765080 of Islamic banks selected for this research study during 2010 to 2014. The mean of bank specific variables i.e. dependent variables shows that LR is 44.16%, DR 82.7844% CAR 18.0872%, EM is 3.688% while on an average the total assets which is indicates the bank

size are about 78,579,389.00 for the full fledge Islamic banks. The mean of 4.794308 branch network indicates that on an average 121 branches for each bank are operating in the country.

For the macro economic variables the above table shows that over the sample period of five years the GDP growth rate of the country is about 3.90% and inflation during five years on an average is 9.1% respectively.

The skewness and kurtosis can be positive and negative. From the above results the skewness kurtosis of all the dependent and independent variables are positive expect of the skewness of ROA and DR. The negative sign of these three variables indicates that data is negatively skewed for these variables.

The kurtosis of LR, BN, GDP and INF is less than 3 and indicates that the distribution of these variables is Platykurtic means that probability values are extreme but for normal distribution they are less than and widely spreads around the mean values. Only CAR have the higher kurtosis than 3 and called as Leptokurtic distribution means the higher probability value. While ROA, EPS, DR EM & BS have the Mesokurtic – normal distribution as the values are equals to 3.

4.4. Correlation Matrix

Table 5: Correlation Matrix

CORRELATION MATRIX								
	LR	**DR**	**CAR**	**EM**	**BS**	**BN**	**GDP**	**INF**
LR	1.000000							
DR	-0.288373	1.000000						
CAR	0.041306	-0.828714	1.000000					
EM	0.438593	-0.717505	0.597501	1.000000				
BS	-0.319289	0.727134	-0.705223	-0.715809	1.000000			
BN	-0.363169	0.725865	-0.620239	-0.612106	0.937179	1.000000		
GDP	0.381644	0.294529	-0.268565	-0.072314	0.326366	0.386789	1.000000	
INF	-0.263037	-0.289854	0.335244	0.146188	-0.365092	-0.422505	-0.698923	1.000000

The above table of correlation matrix is created to check that if there is any independent variable which is affected by the other independent variables used in the research study. The correlation between Bank size and Branch network is 0.937179 which is high and shows that there is multicolinearity between these two variables.

Strong relationship found between the Deposit ratio, Bank size and Branch network as the correlation is greater than 0.70 this indicates that larger the branch network and size, deposits ratio will also be higher for Islamic banks and is weakly related with the GDP.

All variables are negatively related with LR except CAR, EM and GDP and conclude the moderate relationship between the variables. EM is weakly related with INF while BS and BN are moderately related with the GDP growth rate of Pakistan.

CHAPTER 5: CRITICAL DEBATE

5.1. Introduction

This chapter aims to provide insight about the previous empirical studies results in comparison with the research findings interpreted in the previous chapter.

5.2. Model One:

In model one, EPS is selected as an dependent variables and develop this model to check the impact of LR, DR, CAR, EM, BS, BN and macro-economic factors i.e. GDP & INF on EPS of Islamic banks operating in Pakistan. All independent variables except EM and DR and GDP are negatively related with EPS. Although Liquidity ratio (LR) is positively related means if higher the liquidity of an Islamic bank higher will be the net income which ultimately result in high EPS but the study also found that LR is statistically insignificant at 5% significance level, GDP & INF are not significant in explaining EPS and this findings supports the conclusion of ALTaleb & ALKhatib (2015), Omoniyi & IO (2013) and Mukolu & Ogodor (2014). DR negatively impacts the bank's profitability (Alkassim, 2005), deposits are the main source of financing for any bank but it depends on the banks as well that how they are using the funds in and converting it into profitable asset (Bilal, Saeed, Gull & Akram, 2013).

The regression model results depicts that CAR does not impact significantly on EPS i.e. The profitability of banks, result is are consistent with research findings of Omoniyi & IO (2013) and Mukolu & Ogodor (2014). The positive coefficient of CAR reveals that there is a positive direct relationship between the two variables. If a bank maintains the high CAR ratio it depicts the stability and thus results high public confidence on the bank's performance and bank's operational efficiency also increases. SBP decided the minimum CAR and all banks operating in Pakistan are liable to meet the minimum capital requirement.

Other independent variables including BN, GDP & INF are prove to be statistically significant in our research model means there is no relation found between EPS and these variables.

EM and BS are the only variables in the model which are found to be statistically significant in explaining the profitability of Islamic banks in Pakistan by using the proxy dependent variable of EPS. EM is measured by the proxy of operating expenses to Total assets while Bank size is measured by taking log of total assets. Findings of the study matches with the past study conducted on the profitability and efficiency of Islamic banks by Ahmad & Noor (2011) and it is justified by the researchers that operational efficiency plays an important role for profit generation and for attracting and retaining the talent human capital financial and other benefits in the banks are vital. While, for bank size the empirical findings by the researchers suggests that the large bank size means more efficient and profitable due to economies of scale. Eltabakh, Ngamkroeckjoti, & Siad, (2014) discusses in their study that large banking institution are able to achieve the economies of scale easily because they are cost efficient which enables the bank to increase the market share as well.

5.3. Model Two:

The results in model 2 are consistent with the literature that there is no significant relationship between ROA and liquidity because the profitability of Islamic banks is expected to be high if the fewer funds are tied up for the liquidity. Result is supported by the past researches (Teng, 2014 & Idris, 2011). DR proves to be insignificant but positively related with Islamic bank's ROA; the findings are in line with Hassan & Bashir (2003), Alkassim (2005) & Arif, Zubair & Iqbal (2013). Large amount of deposits provides handsome returns to the Islamic banking industry, thus can affect the revenue of banks. Deposits are one of the main funding sources of banks and have a direct relationship with the profitability (Muda, et al., 2013).

CAR is insignificant in explaining ROA but have a positive coefficient with ROA but statistically insignificant, the ratio covers all the risk related to credit or market, thus, high CAR shows better financial cover or protection against the potential losses and will give better return to banking business (Almumani, 2013 & Akhtar, Ali, & Sadaqat, 2011). Insignificant relationship found between EM and ROA (Almumani, 2013) but as per coefficient it depicts the positive relationship with profitability as banks can generate more income by spending more money for operating expense in terms of high payroll for boosting up the human capital, improving the customer service of branches and efficiently meet the

daily requirements by taking care of administrative issues, these all will ultimately result in bank's operational efficiency (Idris, et al, 2011). According to Eltabakh, Ngamkroeckjoti & Siad (2014) it is not important that the banks with higher profit must have higher level of operational efficiency.

BS and BN are found to be insignificantly related with the profitability of Islamic banks. findings are supported by the literature (Akhtar, Ali, & Sadaqat, 2011) because it is not important that bank with large amount of assets and wider branch network will be more profitable as compared to other banks operating in the industry aggressively with others but it depends on the ability to take risk and compete these two factors are used as a proxy for measuring competition as well in the past studies, BS is internal factor while BN also depicts the market share of the bank that can impact the profitability of Islamic banks (Rozzani& Rahman, 2013).

The findings of regression shows that GDP have a negative but statistically significant impact on ROA, this result is supported by previous researches (Sufian, 2011, Khrawish,2011 and Staikouras & Wood, 2011) & conducted and is justified that high growth rate can affect the return of banks because of customer preference to tied up their funds in savings or fixed account, might be unaware about the economic changes or tied the same funds somewhere else policy makers must concentrate on this relation and take a serious note of effect of economic environment of a country on Islamic bank’s profitability and design the strategies for banking operations accordingly (Wasiuzzaman & Tarmizi, 2010).

There is a negative but insignificant relationship found between inflation and profitability, inversely related depicts that high inflation rate will increase the cost and decrease the profits and results in low deposits by customers, but this is proved to be insignificant and supported by the Abbas (2013), Ali, Shafique, Razi & Aslam (2012), and Masood, Aktan & Chaudhary (2009).

CHAPTER 6: CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

6.1. Introduction

After in-depth data analysis of the study finding, this chapter presents the conclusion of this research study while recommending some future implications for the policy makers, future researchers and bankers and discusses the limitation faced by the researcher in conducting the study.

6.2. Conclusion

Islamic banking industry of Pakistan is in its growth stage and emerged back in 2002 now there are five pure Islamic banks operating in Pakistan with wide branch network and 17 conventional banks with an Islamic window. Considering the growth and increasing awareness of Islamic banking among the masses in Pakistan this research study is designed to investigate the various determinants from bank's internal environment and macroeconomic environment of Pakistan to test which factor determines the profitability of Islamic banking institution in Pakistan. This research selected all five Islamic banks and collected five year data from 2010-2014 for dependent variables i.e. ROA and EPS and independent variables i.e. LR, DR, CAR, EM, BS, BN GDP & INF. All the data is collected from secondary sources and Eviews is used for doing the statistical analysis for the banks panel data is analyzed by running least square method regression test, descriptive statistics and correlation matrix. Two separate models for EPS and ROA are developed for hypothesis testing and the F-statistics results at 5% significance level of both models reveals the both models are significant and good fit. The results revealed that GDP and ROA inversely related but are statistically significant while EM and BS are found to be positively related and statistically significant with EPS.

6.3. Policy Recommendations

On the basis of the study finding and statistical significance between the profitability measure and its determinants the following general and specific recommendations are presented in this section of the study that are may in implicated in future for improving the performance of Islamic banking industry of Pakistan. Expense management plays a vital role

in efficient performance and contributes in profitability as well and is directly related with the profits. It is important to control the cost here but as the Islamic banking industry is in its expansionary stage so, need to make necessary and some important expenditures for achieving the operational efficiency and these expense includes high payroll to retaining and attracting the efficient and talented human capital and maintain the branches for giving the pleasant environment to both customer and employees and some other admin expenditures required for running the banking operations smoothly. Bank size is another variable which is proved to be significant in explaining the profitability of Islamic banks. Here, economies of scale theory are applied as the bank size increase it become cost efficient. Islamic banks, in order to increasing its size must start an awareness and promotional campaign for attracting new customer base and must focus on expanding the business in rural areas as well for giving the tough competition to the commercial banks and ultimately results in increased market share of Islamic banking industry.

The general recommendations for Islamic banks include the policy preparations to deal with the economic conditions of Pakistan and create long term and efficient strategy for recruiting and retain the well trained Islamic bankers. One of the biggest problem that is faced by Islamic banks that the human capital are not well trained for Islamic banks either they are fresh graduates or have a working experience of commercial banks. A separate training program must be promoted among the staff of Islamic banks. Various studies provide empirical evidence that performance of Islamic banks and profit status are better as compared to conventional banks. For maintaining the status quo and growth government support in terms of various reforms and supporting policies by SBP are crucially important because Islamic banks at a certain level hinder to take risk as fully fledged Islamic banks are operating in the private sector.

6.4. Limitations and Future Propositions of the Study

Although this research study was conducted by taking all possible aspects required for conducting this study within the time frame and in righteous manner but there are some limitations this study faced by the researcher. Only five year sample period was selected for this research study on fully fledged Islamic banks in operating in Pakistan. Results and analysis can be more appropriate and in depth if large sample period was selected. Further, it

is a time bound research study that must be completed within time frame of four months. Some variables are not selected in this study which can affect the profitability due to availability of data and limited time. Future researchers can take large sample period and can include more critical variables that can impact the profitability of Islamic banking institutions in Pakistan. For analyzing the data researcher totally rely on the secondary data however, primary data can be included by taking expert opinion of the bankers and economist on the profitability and its determinants used in the study so that more factual position of the industry and the economy can be discussed in light of the research results. Further, research only test the model by running least square method on Eviews, future study may run various test which might produce various different result and enables the researcher to do analysis from various aspects as well.

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APPENDICES

Appendix 1

S.NO	ISLAMIC BANKS
1	MEEZAN BANK
2	BANK ISLAMI
3	BURJ BANK
4	DUBAI ISLAMIC BANK
5	AL BARAKAH BANK

Appendix 2

	Years	ROA	EPS	LR	DR	CAR	EM	BS	BN	GDP	INF
MEEZAN BANK	2010	1.23%	2.7200	38.94%	84.70%	12.41%	2.93%	18.8570	5.4027	3.62%	13.70%
	2011	1.69%	4.2200	35.09%	84.78%	14.89%	3.05%	19.1170	5.6168	3.84%	11.00%
	2012	1.28%	3.8800	32.31%	83.96%	14.08%	2.61%	19.4300	5.7366	3.70%	7.40%
	2013	1.20%	3.9500	38.71%	87.89%	12.48%	2.55%	19.6140	5.8608	4.14%	8.60%
	2014	1.04%	4.5600	40.17%	86.97%	11.88%	2.46%	19.8960	6.0591	4.20%	4.80%
BANK ISLAMI	2010	0.10%	0.0900	43.44%	84.82%	19.50%	4.26%	17.6230	4.6250	3.62%	13.70%
	2011	0.70%	0.7757	42.00%	85.94%	17.18%	3.71%	17.8880	4.6250	3.84%	11.00%
	2012	0.55%	0.7782	37.00%	86.47%	15.13%	3.05%	18.1220	4.9488	3.70%	7.40%
	2013	0.21%	0.3509	44.13%	86.64%	15.37%	2.90%	18.2800	5.3033	4.14%	8.60%
	2014	0.31%	0.5809	40.30%	88.57%	16.70%	3.43%	18.4400	5.3613	4.20%	4.80%

	Years	ROA	EPS	LR	DR	CAR	EM	BS	BN	GDP	INF
BURJ BANK	2010	-3.03%	(1.0700)	31.77%	71.49%	38.44%	5.64%	16.6880	3.9120	3.62%	13.70%
	2011	-1.04%	(0.3900)	44.95%	73.55%	41.81%	4.45%	17.1350	3.9120	3.84%	11.00%
	2012	0.18%	0.1100	49.53%	76.13%	22.55%	3.42%	17.6700	4.3175	3.70%	7.40%
	2013	-2.12%	(1.3900)	54.23%	79.97%	20.76%	4.65%	17.7930	4.3175	4.14%	8.60%
	2014	-1.83%	(0.5800)	58.55%	75.71%	18.64%	6.71%	17.3450	4.3175	4.20%	4.80%
DUBAI ISLAMIC BANK	2010	0.02%	0.0100	57.61%	78.76%	20.87%	5.29%	17.5000	3.9318	3.62%	13.70%
	2011	0.40%	0.2800	49.56%	79.86%	20.85%	5.23%	17.6900	4.3175	3.84%	11.00%
	2012	0.54%	0.5043	41.43%	83.63%	19.10%	4.53%	17.9700	4.6052	3.70%	7.40%
	2013	0.17%	0.1962	44.28%	84.28%	14.60%	3.97%	18.2000	4.8283	4.14%	8.60%
	2014	0.59%	0.8608	57.94%	82.56%	17.10%	3.93%	18.4400	5.1648	4.20%	4.80%
AL BARAKAH BANK	2010	-1.71%	(1.1600)	44.27%	81.17%	15.25%	2.63%	17.9225	4.0943	3.62%	13.70%
	2011	0.57%	0.4600	38.06%	84.86%	15.29%	2.66%	18.0997	4.4886	3.84%	11.00%
	2012	-0.87%	(0.7200)	38.97%	85.67%	11.20%	2.85%	18.1178	4.5433	3.70%	7.40%
	2013	-0.05%	(0.0500)	42.18%	86.20%	11.90%	2.56%	18.2901	4.7005	4.14%	8.60%
	2014	0.15%	0.1600	58.62%	85.03%	14.20%	2.75%	18.3625	4.8675	4.20%	4.80%