Determinants of Banking Sector Performance in Pakistan

By Beenishameer M. Ameer

Abstract- The purpose of this research is to examine the relationship between bank-specific and macro-economic indicator over bank performance by using data of ten Pakistani banks including five conventional banks and five Islamic banks over the period 2010-2014. Dependent variable taken for this study is Return on assets, Return on Equity to measure the Banking Sector Performance and independent variable taken for this study including specific factors (Size, Capital, Loan, Deposits, Expenses, Credit Risk and Liquidity) and macroeconomic factors (Gross Domestic Product, Foreign Direct investment and Inflation). This paper uses the correlation and regression method to investigate the impact of size, loans, capital, deposits, liquidity, credit risk, expenses, economic growth, inflation and foreign direct investment on major performance indicators. The empirical results have found strong evidence that both internal and external factors have a strong influence on the performance. A result of study denotes that credit risk, expenses and inflation have indirect link with the bank performance, whereas size of bank, capital, deposit and loan have a significant positive relation with bank’s performance and liquidity have insignificant positive relation with Performance of bank. This study reveals the positive insignificant relation between GDP and performance but significant relation between FDI and performance and indirect relation between inflation and profitability. The results of the study are of value to both academics and policy makers.

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1. Introduction

a) Study background

The Banking sector acts as the life blood of modern trade and commerce to provide them with a major source of finance. This increasing phenomenon of globalization has made the concept of efficiency more important both for the non-financial and financial institutions and banks are the part of them. Banks largely depends on competitive marketing strategy that determines their success and growth (Anon, 2013). Banking sector is very essential part of monetary system. It contributes to economic development so it must be sound and perform well. Due to increasing trend of globalization, efficiency becomes very crucial for banking and non-banking business. Financial Institutions also contribute to the number of diverse sectors of the economy in different ways; it is the source of investment, provide the facilities in the payment procedure and help to export and import products (Hussain & Bhatti, 2010).

The financial system of Pakistan is dominated by the commercial banks. The financial history of the country significantly altered in early 1970s with nationalization of domestic banks and growth of public sector development finance institutions. By the end of 1980s, it became quite clear that the national socio-economic objectives could not be achieved by nationalization. The public sector in banking and non-bank financial institutions was liable for financial inefficiency, deteriorating quality of assets and growing threats of downfall of financial institutions. By the end of 1990, public sector’s share in the banking industry was almost 90 percent in total assets, while the rest belonged to foreign banks, as domestic private banks did not exist at that time. Besides this high shares existed for deposits, advances and investments. The structure of banking system in Pakistan underwent significant changes after 1997 when the banking supervision process was aligned with international best practices. Privatization of public sector banks and the ongoing process of merger/consolidation brought visible changes in the ownership, structure, and concentration in the banking sector (State Bank of Pakistan, 2009).

Financial intermediaries perform key financial functions in economies; provide a payment mechanism, match supply and demand in financial markets, deal with complex financial instruments and markets, provide markets transparency, perform risk transfer and risk management functions. Economies that have a profitable banking sector are better able to withstand negative shocks and contribute in the stability of the financial system (Athanasoglou, Brissimis & Delis, 2005).

The Pakistani banking system has traditionally occupied an important position in Pakistan financial system which is based on universal banking framework that legally authorizes commercial banks to service various kinds of activities in financial markets. Most of transactions and activities of money and capital markets are carried out by Banks in Pakistan became more open to these kinds of risks particularly in the financial liberalization period after 1990s. As a result of various financial risks, financial crises in 1994, 2000 and 2001 occurred and they showed how important risk management is to the financial institutions and the businesses in the real sector. After the 2001 Crisis, the Rehabilitation Program was launched by Pakistan.
Banking Regulation and Supervisory Agency. State and private banks were restructured and profitability and stability of Pakistan banking system increased with the help of this program (Qazi Abdul Subhan, 2010). The major development started in earlier 1990s in the banking sector of Pakistan. The basic intention of these changes is to take such steps which can bring efficiency and accuracy in them. Following are the major changes happened because of restructuring in the banking sector. Firstly, Privatization of banks primarily increased the quality of services by professionalism. Secondly, Privatization made enormous upward movement in profits due to more innovative product because banks have already lost the extensive part of profit due to inefficiency and deficiency in the quality of service during era of nationalism. Thirdly, due to reforms, banks apply hard and severe procedures for the evaluation of loans; which decreased the default ratio of borrowers (Dr. Salma & Ahmad, 2011). There are mixed studies on performance of banks based on the number of countries and types of banks included in the study sample. ROA and ROE have been widely considered as performance measures (Delis & Staikouras, 2006; Hassan & Bashir, 2003), while researchers have also included Interest Margin (Khrawish, 2011).

Performance as defined by Bourke (2013) is the net after-tax income of banks commonly measured by return on assets and return on equity ratios. Numerous external factors that affect these ratios include; inflation rate, real interest rate, real gross domestic product, imports and exports of a country etc.

The basic reason to conduct this study is to examine the relationship between bank-specific and macro-economic characteristics over bank performance. It is the vital requirement for the competitiveness of financial service organization. It plays a key role in order to attract depositors for supplying their funds on advantageous terms. Inclusively a better and gainful financial institution is capable to recover loss more easily and helped to bring the stability in the monetary structure. The stakeholder of banks and regulators are assures higher profits figures by reducing the chances of financial problems (Ramlall, 2009; Rahman, 2011). Performance as defined by Bourke (2013) is the net after-tax income of banks commonly measured by return on assets and return on equity ratios. Numerous external factors that affect these ratios include; inflation rate, real interest rate, real gross domestic product, imports and exports of a country etc.

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b) Statement of Problem

Financial sector is considered to be the main contributor to economic development. As banks is one of the key financial sectors so the strong and profitable banks leads to economic growth of country. The growing importance of bank’s performance make the regulators, bank management, researchers, educational institutes, to take significant interest to examine the determinants of banks performance (Athanasoglou et al., 2005; Said et al., 2013). So that they can appraise the banks performance in term of profit and regulate the regime policies, financial plans decision to reach the desired goals and choices of depositor (Pasiouras & Kosmidou, 2007; Ali, 2010). It has been found that liquidity, cost, equity/capital, and bad debt/advances these variables have direct effect over banks profitability (Sulian, 2009; Rahman, 2011; Anon, 2013).

This study reveals the gap that other variables can also be tested to find their impact over performance of commercial banks in Pakistan. The broad question of my research study is “Determinants of banking sector performance” creates the need to carefully evaluate the impact of other bank specific factors (size, capital, loan, deposits and liquidity, credit risk and expenses) and economic indicator (GDP, inflation and FDI) on performance of banking sector, which is measured through return on assets (ROA) and return on equity (ROE). So that formulation of strategies took place for development in the banking sector performance.

c) Objectives

The basic objective of this research is to determine the variables affecting Bank’s performance. Sub objective include:

- To observe the performance of five conventional banks and five Islamic banks in Pakistan in last 5 year.
- To identify factors affecting the bank’s performance.
- To determine which factors effect positively and which effect negatively and to find the gaps between them.
- To investigate the existing economic indicators and banks specific variables and its relation with the bank’s performance in Pakistan.
- To suggest the strategies for improving bank’s performance.

d) Research Question

The main question of my research study is:

What are the impacts of bank specific factors on bank’s performance in Pakistan?

- What is effect of size on bank’s performance?
- How loan affect bank’s performance?
- What is the relationship of capital and bank’s performance?
- What is the relation of deposits with the performance?
- What is the connection of cost and bank’s performance?
- What is the link between credit risks and bank’s performance?
- What is the relationship of liquidity ratio and bank’s performance?

What are the impacts of Macroeconomic variables on bank’s performance in Pakistan?
• What is the link of GDP on performance of banks in Pakistan?
• What is the relation between FDI and banks performance?
• What is the influence of inflation on performance of banks in Pakistan?

e) Significance of Study
The growing importance of bank’s performance make the regulators, bank management, researchers, educational institutes, to take significant interest to examine the determinants of performance (Athanasoglou et al., 2005). So that they can appraise the banks performance in term of profit and regulate the regime policies, financial plans decision to reach the desired goals and choices of depositor (Pasiouras, & Kosmidou, 2007; Ali, 2010). This is the first paper addressing the determinants of banking sector performance. Past researchers and practitioners have not given the proper attention to macroeconomic indicator and credit risk. This paper helps in understanding the bank specific factors and economic indicator and their impact on the performance of the banking system.

Finally, the researches about the banks performance even become very significant due to fiscal and monetary crises. In the coming years around the globe, these crises have essential effect on many countries banking sector. Hence, the necessary plan of a bank’s organization is to attain performance, which is the important condition for operating any business (Deger & Adem, 2011). The study of economic indicators is also necessary because it helps us to understand the trend of economic activities which complements the monetary policy, and this monetary policy has its impacts on the bank’s performance.

In order to increase the profit, the key success factors of banks should be determined so that formulation of strategies took place for development in the banking sector.

f) Research Study Plan

<table>
<thead>
<tr>
<th>WEEKS</th>
<th>TASK</th>
<th>TASK NAME</th>
<th>TIME REQUIRED</th>
<th>TASK COMPLETED</th>
<th>MEETING DATE</th>
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<tr>
<td>WEEK -1</td>
<td>1</td>
<td>BASIC RESEARCH DISCUSSION</td>
<td>2 WEEKS</td>
<td>5%</td>
<td>8th, 15th September</td>
</tr>
<tr>
<td>WEEK -3</td>
<td>2</td>
<td>AREA FINALIZATION</td>
<td>1 WEEK</td>
<td>10%</td>
<td>22nd September</td>
</tr>
<tr>
<td>WEEK-4</td>
<td>3</td>
<td>INITIAL TOPIC DISCUSSION AND BASE PAPER</td>
<td>1 WEEK</td>
<td>20%</td>
<td>29th September</td>
</tr>
<tr>
<td>WEEK-5</td>
<td>4</td>
<td>FINALIZATION OF TOPIC AND BASE PAPER</td>
<td>2 WEEKS</td>
<td>25%</td>
<td>6th, 13th October</td>
</tr>
<tr>
<td>WEEK-6</td>
<td>5</td>
<td>FURTHER DISCUSSION ON TOPIC AND REDFINING THE TOPIC</td>
<td>1 WEEK</td>
<td>30%</td>
<td>20th October</td>
</tr>
<tr>
<td>WEEK-7</td>
<td>6</td>
<td>INITIAL FORMAT OF PROBLEM STATEMENT, RESEARCH OBJECTIVE AND METHODOLOGY</td>
<td>1 WEEK</td>
<td>45%</td>
<td>4th November</td>
</tr>
<tr>
<td>WEEK-8</td>
<td>7</td>
<td>PROPOSAL SUBMISSION</td>
<td>2 WEEKS</td>
<td>60%</td>
<td>16th December</td>
</tr>
<tr>
<td>WEEK-10</td>
<td>8</td>
<td>PROPOSAL RESUBMISSION AFTER ACCEPTANCE</td>
<td>1 WEEK</td>
<td>70%</td>
<td>6th February</td>
</tr>
<tr>
<td>WEEK 11</td>
<td>9</td>
<td>LITERATURE ENRICHMENT</td>
<td>2 WEEK</td>
<td>75%</td>
<td>24th March</td>
</tr>
<tr>
<td>WEEK-13</td>
<td>10</td>
<td>DATA GATHERING</td>
<td>2 WEEKS</td>
<td>80%</td>
<td>7th April</td>
</tr>
<tr>
<td>WEEK-15</td>
<td>10</td>
<td>DATA ANALYSIS</td>
<td>3 WEEKS</td>
<td>90%</td>
<td>21st April</td>
</tr>
<tr>
<td>WEEK-19</td>
<td>11</td>
<td>RESULTS, DISCUSSION AND CONCLUSION</td>
<td>2 WEEKS</td>
<td>95%</td>
<td>6th May</td>
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<tr>
<td>WEEK 21</td>
<td>12</td>
<td>FIRST DRAFT SUBMISSION</td>
<td>2 WEEKS</td>
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<tr>
<td>WEEK-23</td>
<td>13</td>
<td>SUBMISSION OF FINAL COMPLETE RESEARCH</td>
<td>2 WEEKS</td>
<td>100%</td>
<td>1st June</td>
</tr>
</tbody>
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END

g) Research Structure
The current research is structured as follow: chapter 1 consists of introduction which includes, background, scope and structure of research, chapter 2 consists of review of literature, chapter 3 consists of methodology, outlining both the broad research design and justifying the particular methods and techniques selected. Chapter 4 consists of results outlining the finding of research. Chapter 5 includes analysis and evaluation that tells us about the significance of the results and it spots the implications in the light of the research questions. Chapter 6 includes the conclusion and limitations of the research and it also includes some recommendations. This concludes with bibliography and appendices.

II. Literature Review
The determinants of banks’ performance are usually assorted into internal and external factors. Some studies were country specific and few of them considered panel of countries for reviewing the determinants of profitability. Overall these studies...
propose that the determinants of profitability for bank can be divided into two groups; internal and external factors. These studies specify return on asset (ROA) and return on equity (ROE) as the dependent variables and considering the internal and external factors as independent variables (Bourke, 2013). There are mixed studies on performance of banks based on the number of countries and types of banks included in the study sample. ROA and ROE have been widely considered as performance measures (Delis & Staikouras, 2006; Hassan & Bashir, 2003), while researchers have also included Interest Margin as performance measures (Khrawish, 2011).

Performance as defined by Bourke (2013) is the net after-tax income of banks commonly measured by return on assets and return on equity ratios. Numerous external factors that affect these ratios include; inflation rate, real interest rate, real gross domestic product, imports and exports of country etc. The external determinants are reflecting economic and legal environment that affects the operation and performance of banks. According to the nature and purpose of each study, different variables could be used. Among the internal determinants, there are bank specific financial ratios representing capital adequacy, cost efficiency, liquidity, credit risk, asset quality, and size. Economic growth, inflation, market interest rates, investment and ownership are external determinants that affect bank profitability.

a) Impact of Bank Specific Factors on Profitability

In Pakistan, banks have been playing an important role in the economic development (Anis, 2013) and they are also affected by the macroeconomic conditions. Over the past decade, Pakistani banks have faced financial stability challenges due to changes in economic indicators. A lot of work has been done in foreign literature, Haque, Osman and Ismail (2003) and Kosmidou, and Pasiouras (2007) give evidence of significant contribution of external factors towards earnings of banks, but there are few studies which evaluate the performance of banking sectors in Pakistan, Hamdani (2011) and Gul, Irshad, and Zaman (2011) have done research into this topic covering only up to five-year time period. Hassan and Bashir (2003) analyze the factors of Islamic bank’s performance across eight Middle Eastern countries for 1995-2000 periods. In Pakistan case, Ali (2011) find higher total assets may not necessarily lead to higher profits due to the diseconomies of scale and higher loans contribute towards profitability but their impact is not significant. Also it is found that equity and deposits have significant impact on profitability. Some studies aimed at analyzing bank profitability in groups of countries, such as Grigorian and Manole (2002), Sufian (2009), Hassan and Bashir (2003), Athanasoglou et al., (2005). A various number of internal and external determinants were used to forecast the profitability and efficiencies. Burki and Niazi (2006) analyzed the impact of financial reforms on the efficiency of state, private and foreign banks of Pakistan by using data of 40 banks for the period 1991-2000. They found a positive impact of banks size, interest income to earning assets and loans to deposit ratio on estimated efficiency scores.

Young Tang (2012) examines the profitability of banking zone on different countries. They take about 18 European countries’ data during the 2001-2010 periods. They found a significant positive association with the return on equity and the level of interest rates, bank concentration and government ownership during their study. Allen and Gale (2004) identified a positive relationship between size and profitability. They found that higher the funds can easily meet their rigid capitals so that they can have extra funds for giving loans to borrowers and thereby increase their profits and earning levels. Campbell study in (2007) explains market structure and performance in 18 European countries using pooled data. Their finding includes that anti-trust or regulatory policy should be designed at changing market structure in order to increase competition or the quality of bank performance. Increasing concentration in banking markets should not be restricted by antitrust or regulatory measures.

Haskell (2012) finds a positive and direct relationship between capital and profits of banks. It implies that a more efficient bank should have higher profits since it is able to maximize on its net interest income. A study conducted by Barros and Ferreira (2010) examined the factors that influence the bank’s profitability in Malaysia and the result of this study shows that efficiency in managing cost and interest rates of market are key determinants in determining commercial banks’ profitability. It is also concluded that if current account deposit without interest increases reduces the cost of banks and it will increase the profit. Commercial banks in many countries usually engage in investment activities provide new funds to its clients. This progression will run easily if transformation from savers to borrowers happened (Bologna, 2013). According to Chris study in (2006) and Anon (2013), there are many types of risk which involved in this process and credit risk is a major risk for banks, in which banks granted loans to its customers and there is a risk of customers inability to pay loan or risk that loan will not be paid on timely manner or paid partially. They find a negative relationship between credit risk and profitability. It shows that whenever there is negative relationship between them, then it signify that greater risk linked with loans, higher the level of loan loss supplies which thereby and create a trouble at the profit-maximizing strength of a bank.

i. Deposits

Deposits are the main source of banks funding and are the lowest cost of funds. The more deposits are
transformed into loans, the higher the interest margin and profit. Therefore deposits have positive impact on profitability of the banks. Naceur and Goaied (2005) stated that profitability of bank is closely related to the amount of cash the bank holds. Deposits play a key part in bank financing, as an important part of commercial bank assets are generally financed by customer deposits. Therefore, a bank that is able to generate more cheap deposits will be able to provide more loans competitively and will generate higher profits, if all other factors are held constant. The results imply that banks with higher amount of capital rank high because of its ability to accumulate more deposits than weakly capitalized banks (Khoirunissa, 2007). The study of Grigorian and Manole (2002) empirical evidence stated that those banks that have ability to achieve a higher level in deposit accounts with respect to its assets can perform best. Funds availability can be increase by the proportion of sum of deposits to sum of assets and available funds can be use by the bank in various ways as profitable investment and lending activities. Mobarek and Kalonov (2013) concluded that previously isolated banks financing costs beside financial crises the core deposits such as demand deposits and savings are largely inelastic. Ratnovski and Huang (2009) found that Canadian banks compared with other large commercial banks were more flexible in the economic crisis of 2008, because it got more support from depository funds as compared to other banks which relied more on wholesale funding. With a superior portion of customer deposits in the liabilities of banks can also increase the bank’s profitability. The research study of Garcia, Gavila, and Santabárbara study (2009) recognized that the relation between deposits of commercial banks and their individual performances is very strong. Deposit acts as a cheap and secure source of finance in compared to other financing resources.

ii. Expenses

Molyneux and Thornton (2008) studies on a sample of seventeen commercial bank 2000-2005 time period in Malaysia. In this study, it is found that efficient expenses management is one of the most significant in explaining high bank profitability, high expense ratio is associated with low bank profitability.

An extensive literature is available which revealed that expenses can be used to measure the profitability of any institute. For example, direct relationship of cost and quality improvement means which banks keep expenses low can make higher profits. In all businesses, profit is lower by higher cost and profit is higher by lower cost. The study conducted by Bourke (2013) revealed that reduction in costs and improvement in efficiency increases the profitability of financial institutions, as well as there is a negative relationship between a ratio of operating expenses and profitability. Recent studies also cover the area bank efficiency such as (Berger & Humphrey, 2003). These studies show that there is indirect relationship between operating costs and the bank’s profitability i.e. as the operating costs decrease, the profitability of banks increase. Expenses are measured by the ratio of costs to revenue. By this ratio banks can obtain an idea about the efficiency of management and it shows the ratio of expenses to revenue of companies. Kosmidou (2008) stated that banks that have higher capital ratio bear less operating costs and earn greater return. It is used as a determinant of the capacity to manage costs. Reduction in the income of banks is due to incompetency of the management to control the cost of bank and connected to pressure in the competitive market (Muriu, 2011). Some other researchers Samad, 2004; Zeitun, 2012) found a negative connection of the cost-revenue and profitability. This implies that commercial banks are able to work at a lower cost. This results is agree through outcome of Siraj and Pillai (2012) that shows the effective cost control is condition of improving the profitability of Swiss banks. So expense to income ratio is an indicator of operating effectiveness, that declines approximately all over the places in different amounts due to increase in competition and banks expenditures decrease for a breakeven point of production. Some other past studies also provide extensive literature which showed that efficiency and profitability are positively correlated (Alexiou & Sofoklis, 2009; Olson & Zoubi, 2008; Kablan, 2012).

iii. Loan

Garcia et al., (2009) found that better capitalized bank seem to be more profitable. Also, in case that a bank’s loan volume is growing faster than the market, the impact on bank profitability is positive. According to past researches that described a positive relationship between the percentage of loans in the assets of bank and performance, or there is also the literature available that show an indirect or negative link between performance of bank and liquidity (Chiorazzo, Milani & Salvini, 2008; Barros et al., 2010). Sufian (2009) reported that as advances/loans granted by bank’s increase, bank’s profitability also increase. The greater amount of the loan, the higher the NIM and bank profits. Sasrosuwito (2011) stated that there is a direct connection between the profitability and loan. When the financial institutions perform more lending activities, they express to be more profitable. If a higher level of reserves for bad debt is maintained then the bank’s ability to make loans reduce and therefore decreased profitability of banks significantly. Bank loans are major source of revenue, and chances to have positive impact on profits. Better economic conditions improve the credit worthiness of borrowers, this increase in credit demand from households and businesses, positively
iv. Size

In most finance literature, total assets of the banks are used as a proxy for bank size. Bank size is represented by natural logarithm of total asset (log A). The effect of bank size on profitability is generally expected to be positive. Hunjra and Bashir study (2014) revealed that relation between size and capital sufficiency of a bank is direct and which shows that comparatively large bank produces higher profit rates than small size banks. Siraj and Pillai (2012) demonstrated that certain costs can be saved with the increase of banking institutions size. Along with the technological innovations many of the banks lean to increase their size over time to enhance their branch networking operations. Naceur and Goaied (2005) investigated that bank do not significantly affect the banks profits because the bigger banks do not mean the higher earnings (represented by the return on Assets ROA). Kakakhel (2013) found that banks with medium size network may have the earning issues in that particular branch network but the overall profitability of firm is not affected by the bank size because of optimization of the operations. The Study of Javaid, Anwar and Zaman (2011) recommended that size of the bank may be positively affect the profitability up to a certain limit and further than this limit it may be negative because of different elements i.e. the countries selected for test and periods of study. Researchers also found that there is direct link between size and profitability of a bank and costs might reduced only up to some extent with the increase of bank size and some time even large banks address the inefficiency of scale. Mamatzakis (2010)) analyze the indirect relation between the bank size and the performance of bank and also revealed that the variables that are directly related to the strategic planning of the banks (i.e. personnel expenses, size, loans to assets ratio, equity to assets ratio) are the ones that mainly explain profitability. Said et al. (2013) found a positive relationship in the size and profitability of banks. It also examined that economies of scale depend upon the size of bank because small size banks is less gainful than the large size banks, while negative ratio of bank size with profitability is also showed by empirical evidences. Research conducted by Jaffar and Manarvi (2005) found that increased provision of funds in large banks can easily covered their unyielding capital and additional funds can be available to them for making loan payments to borrowers and to boost their profits and income levels.

v. Capital

The ratio of equity to total assets (CA) is considered one of the basic ratios for capital strength. It is expected that the higher this ratio, the lower the need for external funding and the higher the profitability of the bank. It shows the ability of bank to absorb losses and handle risk exposure with shareholder. Equity to total assets ratio is expected to have positive relation with performance that well-capitalized banks face lower costs of going bankrupt which reduces their costs of funding and risks (Brook, 2008; Bourke, 2013; Parashar & Venkatesh, 2010). Generally the companies can raise money from two major sources internal source and external source. When a company plowbacks the part of its profits that is internal source and when the firm raise money through the issuance of equity or the debt that is external source. So the capital structure is considered as the source through which the any company finances itself whether through debt or equity, as this is the crucial component of firm because it determines what return remains for stockholders after paying the debt holders. The company should always strive that combination of debt and equity (i.e. capital structure) which is beneficial for the all stakeholders of the company especially shareholders (Rattray, 2012). Some research study revealed various results regarding financial leverage of the firm. The first one is negative connection between finance leverage and performance of firm calculated by the return on equity. Second the difference in performance of high levered firms and low levered is not significant and finally the financial leverage and performance are negatively related no matter whether firm is growth or not. The negative relationship occurs because of excessive borrowing as it magnifies the bankruptcy risk and lowers the tax shield which ultimately affects profits and performance. Some results have been revealed by the other researchers (Olson et al.,2008) found the negative relationship between firm performance and capital structure same as revealed by packing order theory which shows that the profitability and leverage are negatively related because the excessive amount of debt decreases the business performance due to burden placed by debt. Abhor (2005), revealed that performance or profitability of firm is positively related to the short term debt, which shows that short term borrowing is preferable to profitable firms. However it was also revealed in same research that performance is indirect linked to long term debt and the direct influenced to total debt. Same results are driven by the other researcher, Haskell (2012) identified that the major source of financing bank assets is debt, and the major part of debt is the short term debt. However there are no definite relation defined for capital structure and profitability of firm like theory of tradeoff defines positive link between firm performance and firm performance, the other theory of agency cost identifies the firms with higher debt have low agency costs improves efficiency of the firm which ultimately enhances the company performance and the theory of pecking order shows the negative relationship between firm performance and firm debt level (Gul et al., 2011).
vi. Liquidity

The ratio of liquid assets to total assets (LQD) is used in this study as a measure of liquidity. The higher this percentage the more liquid the bank is. Insufficient liquidity is one of the major reasons of bank failures. However, holding liquid assets has an opportunity cost of higher returns. Bourke (2013) finds a positive significant link between bank liquidity and profitability. However, in times of instability banks may chose to increase their cash holding to mitigate risk. Unlike Hunjra and Bashir (2014), Molyneux and Thorton (2008) come to a conclusion that there is a negative correlation between liquidity and performance levels.

Banking is the passing funds from surplus holders of the money to the deficit holders, which identifies the bank role as intermediary. Such activities make banks more prone to the liquidity risk. The commercial bank’s liquidity is paying ability of banks for all the obligations (i.e. contractual) whenever they come due. Liquidity also impacts the bank’s profitability so the banks need to manage the liquidity very well because of the positive relationship between liquidity and profitability. Banks can face financial crisis and shocks effectively if it has adequate liquidity but the excessive liquidity can diminish profitability because liquid assets have little capacity to generate interest so the liquid assets held by banks should be adequate not the excessive (Levine, 2000).

Sometimes liquidity and profitability move oppositely because shareholders and depositors desire different things. Shareholders have interests in profitability however depositors have interests in liquidity. So the banks should hold the optimal liquidity because the excessive liquidity and illiquidity are like financial diseases which negatively affect the banks profits and performance (Li, 2011). To overcome the dilemma in liquidity and profitability trade off the banks should strive for optimal liquidity level means the banks should not have lack or excess of liquidity (Anis, 2013) consistent with results of (Disinter, 2012). For the liquidity working capital is the crucial component for the financial management of the company. Efficiency in managing the working capital affects the profitability. Barros et al. (2010) investigated that different liquidity factors affect the almost every profitability ratio so the profitability would increase with the increase in free cash flows and decrease in cash conversion cycle of firm. So the value for the corporate shareholders can be created if the managers strive to reduce the inventories and days in account receivables (Goldberg, 2004).

vii. Credit Risk

Credit risks include the risk of loss due to nonpayment by borrower of a loan or both the principal or interest amount, the level of bad debts problem loans and allowance for loan losses (Campbell, 2007).

Trujillo-Ponco study (2012) reveals that credit risk is the risk of loss due to inability and unwillingness to pay loan that granted by a bank, either partial or full. Credit risk is vital factor of the bank’s performance. The greater the bank’s exposure to credit risk, the greater the tendency of banks experiencing financial crisis and vice versa. Garcia et al., (2009) reported in study that credit risk is crucial because the default of a large client can make bank less profitable, which result in bankruptcy of bank. The study concluded that deviations in bank profitability are largely influence by changes in credit risk, and that greater supervision of credit risk is normally linked with increase in profitability.

Dridi and Hassan (2009) found a negative relationship between credit risk and profitability. It shows that whenever there is negative relationship between them, then it signify that greater risk linked with loans, higher the level of loan loss supplies which thereby and create a trouble at the profit-maximizing strength of a bank.

Ali (2010) study shows that financial institutions that are advance more risky loans raise the non performing loans and reduce the performance. Reasons which create high risk loans, decrease in profit is due to addition in unpaid loans may raise, because of these loan losses. This result is making clear that the banks that advanced more risky loans bared the loss of accumulated unpaid loans. These bad debts lower the yields of effected banks. The study of Allen and Gale (2004) revealed that the profitability is measured in terms of ROA and ROE, that were negatively related to the default rate of loans of banks, it reduce the profitability of that bank. If the bank’s credit risks carefully manage then by keeping credit risk within satisfactory limits, rate of return can be increased and this will maximize profitability (Ramlal, 2009; Khoirunissa, 2007).

b) Impact of Macroeconomic Factors on Profitability

As Pakistan is dominated by Banking sector (SBP, 2012), it is of vital concern to associate their profitability with country’s progress, and hence, a study to identify the cumulative impact of macroeconomic variables on the performance of banks would add to the strategies devised in interest of the institutions’ development.

Goldberg (2004) statistically proved direct relationship of inflation rate and indirect relationship of real interest rate on ROA of 5 major Islamic banks over a period of 1984-2002. Staikouras and Wood (2003) reviewed the performance of European Banking industry for years 1994-1998. Using ordinary least square method and fixed effects model they concluded that interest rate has a significant positive but growth of GDP exerts significant negative impact on ROA. Kablan yousafi (2012) also estimated the profitability of 583 European Union domestic banks where cross sectional regression showed a significant positive effect of GDP on profits. Further, Kosmidou (2008) examined domestic

i. **GDP**

It is a measure of the total economic activity and it is adjusted for inflation. It is expected to have an impact on numerous factors related to the demand and supply for banks deposits and loans. According to the literature on the association between economic growth and financial sector performance, GDP growth is expected to have a positive relation on bank profitability (Demirguc-Kunt & Huizinga, 2001; Bikker & Hu, 2002). In this context, we expect a positive relationship between bank profitability and GDP development as the demand for lending is increasing.

Economic indicators in 2013 propose that economic activity should be stabilized in the first part of the year. This stabilization should be continued in the second part and export thus benefits a growth of global demand and domestic demand which is being supported by the appropriate monetary policy position. In addition, the reforms in financial markets since July last year and the continued execution of structural reforms should be such that they may prove beneficial for the economy. Simultaneously, necessary adjustment of balance in the public and private sectors, and the related tensed credit conditions, will carry on evaluating on economic activity (Anon, 2013).

GDP of Pakistan has been increased due to the outstanding public debt but income per capita is lower than indebtedness per citizen. This public debt altogether is the consequence of the poor structural conditions in the foreign and domestic accounts. In local market many tools are present to the government by which it funds can be mobilized to finance or tackle the deficit I budget. Variable tools of debt have variable rules in terms of ease of use, outlay and periods of maturity. (Syed Imran Rais, 2012). Depreciation of the currency to the relation with Euro leads the borrowers who have loans in Euros towards the miserable financial situations of loans and increasing their risk of default loans. The financial crisis occurring in the world has worsened our banking system, by worsening the macroeconomic indicators and the loans offered. Increasing inflation and change in the GDP has destroying effect on the banking portfolio. By statistical analysis of the period of Albania it is concluded that Growth rate of GDP has fallen. This fall is due to the economic and financial crisis. And the factors responsible for this decrease of ΔGDP are the difficulties faced by the financing business and deficiency of demands, the decrease in payments and savings is due to the reason that most of the family not lend by the banks and deduction is made from their net income from remittance (Haque et al., 2003).

ii. **Inflation**

It is defined as "the average amount by which goods and services are increasing." (Rattray, 2012). In the study of Pakistan, Inflation has worst impacts on economic growth. i.e. increase in one unit of inflation results in the decrease of GDP and similarly interest rate also has a very clear opposite or inverse relation with economic growth. (Rehman, 2011).

This measures the overall percentage increase in Consumer Price Index (CPI) for all goods and services. Inflation affects the real value of costs and revenues. The relationship between the inflation and profitability may have a positive or negative effect on profitability depending on whether it is anticipated or unanticipated (Brook, 2008). If an inflation rate is anticipated, banks can adjust interest rate in order to increase revenues than costs. On the contrary, if inflation rate is not anticipated, banks cannot make proper adjustments of interest rate that costs may increase faster than revenues. But most studies observe a positive impact between inflation and profitability (Bourke, 2013; Hassan and Bashir 2003; Haque et al.,
and that we expect to be positive in this study. Financial activity is lessened by higher inflation. Economies having high inflation rate have mediators who will lend less and ineffectively allocate the capital, and capital markets have less liquidity and is smaller. Many inflation forces may influence the association between inflation and financial sector conditions. If the high inflation persists for a long time growth rates will be decreased. The data in the paper highly assist the nonlinear relationship between inflation and performance of financial sector, maybe driven by doorstep rates of inflation (John, 2000).

If the inflation rate is higher than the interest rate of your bank then you have to pay less back. Increase in inflation make the forecasting of prices and cost difficult so it is difficult to make investment planning. As rate of inflation or general prices appreciates, need of people for dollars appreciates to continue their business. Interest rate increases with the increase in the demand of the money. Increase in the rate of interest demotivated spending behavior of people, as the investment cost also increases. If unforeseeable variations in rate of interest have influences customers reluctant to sign long term contracts or agreements related to businesses (Haskell, 2012).

The factors determining effectiveness of banks in China, also determine the effects of inflation on effectiveness of banks at the same time having power over specialized factors of industries and financial institutions. Empirical results in this study show a direct relationship between productivity of banks, cost effectiveness, growth of financial institutions, efficiency of stock exchange markets and inflation in China. Low productivity in banks resulted from high rate of taxes and other fluctuations in market activities. (Yong Tan, 2012).

iii. FDI inflow

Policy making and expanded local markets of Pakistan are normally favorable to FDI, however terrorism and law and order situations and innate calamities are demotivating factors for investors. Pakistan was ranked at tenth amongst the largest beneficiary of (IFDI) in year 2006 to year 2008 in the continent of Asia. Other developing countries are also successfully investing in Pakistan. The strategy administration is also at favorable terms with investors, and as compare to other neighbor countries investing in Pakistan is easier. But these benefits do not continue for long; FDI flows condensed by 60% from year 2009 to year 2010, an indication of worldwide trends and internal complications. (Hamdani, 2011). FDI inflows to Pakistan have improved in the last 20 years in particular regions, ratio of the countries investing in Pakistan become greater than before; but great amount of FDI is at a standstill from the countries investing before. In Pakistan the FDI inflows are not only intense but also irregular.

The most interesting is, the main investors are also trade partners of Pakistan. Consequently, it is interesting to know the cause and effect relation of FDI inflows from trade partners with growth, trade and domestic investment and gauge the impact of the concentrated FDI inflows on exports, domestic investment and growth in Pakistan (Li, 2011). FDI has great impact on predicament and non predicament economic situations. Overseas banks are lenders more influenced by economic indicators in rising markets. Overseas entrants’ help in the supply of production of more versatile forms of funds, in standard foremost loan supply are less influenced by macroeconomic activities but are more responsive to foreign irregularities. Introduction of foreign entrants into up-and-coming markets slows down the frequency of substandard situations or credit risk, but increases the prospective for superior infection through impacts of ordinary lenders. The contamination matter is condensed when overseas banks have an impactful supplementary existence, as contrasting to sustaining domestic markets through foreign exchange (Goldberg, 2004). The results in this article indicate a sturdy direct and significantly positive developmental impact of FDI all the way through the entire continent, and particularly in African region and countries notified for their oil production. And at the same time foreign banks lending in Africa cause significant growth. (José Brambila Macias, 2009).
c) **Theoretical Framework**

![Diagram showing relationship between bank specific variables and macroeconomic variables]

<table>
<thead>
<tr>
<th>Bank specific variables’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
</tr>
<tr>
<td>Capital</td>
</tr>
<tr>
<td>Loan</td>
</tr>
<tr>
<td>Deposits</td>
</tr>
<tr>
<td>Expenses</td>
</tr>
<tr>
<td>Credit risk</td>
</tr>
<tr>
<td>Liquidity</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Macroeconomic variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
</tr>
<tr>
<td>Inflation</td>
</tr>
<tr>
<td>FDI</td>
</tr>
</tbody>
</table>

| Bank’s performance (ROA) & (ROE) |

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d) **Research Hypotheses**

The objective of this study is to find out the relationship of internal and external factors with Bank’s performance. Based on the objective, the present study seeks to test the following hypothesis:

H01: There is no direct relationship between SIZE and bank’s performance.

H1: There is a direct relationship between SIZE and bank’s performance.

H02: There is no direct relationship between CAPITAL and bank’s performance.

H2: There is a direct relationship between CAPITAL and bank’s performance.

H03: There is no direct relationship between LOAN and bank’s performance.

H3: There is a direct relationship between LOAN and bank’s performance.

H04: There is no direct relationship between DEPOSITS and bank’s performance.

H4: There is a direct relationship between DEPOSITS and bank’s performance.

H05: There is no indirect relationship between EXPENSES and bank’s performance.

H5: There is an indirect relationship between EXPENSES and bank’s performance.

H06: There is no indirect relationship between CREDIT RISK and bank’s performance.

H6: There is an indirect relationship between CREDIT RISK and bank’s performance.

H07: There is no indirect relationship between LIQUIDITY and bank’s performance.

H7: There is an indirect relationship between LIQUIDITY and bank’s performance.

H08: There is no indirect relationship between INFLATION and bank’s performance.

H8: There is an indirect relationship between INFLATION and bank’s performance.
H09: There is no direct relationship between GDP and bank’s performance.
H9: There is direct relationship between GDP and bank’s performance.
H010: There is no direct relationship between FDI and bank’s performance.
H10: There is a direct relationship between FDI and bank’s performance.

III. Research Methodology

a) Conceptual Framework
i. Dependent Variables

The profitability variable is represented by two alternative measures: the ratio of profits to assets, i.e. the return on assets (ROA) and the profits to equity ratio, i.e. the return on equity (ROE). In principle, ROA reflects the ability of a bank’s management to generate profits from the bank’s assets, although it may be biased due to off-balance-sheet activities. ROE indicates the return to shareholders on their equity and equals ROA times the total assets-to-equity ratio. The latter is often referred to as the bank’s equity multiplier, which measures financial leverage. Banks with lower leverage (higher equity) will generally report higher ROA, but lower ROE. Since an analysis of ROE disregards the greater risks associated with high leverage and financial leverage is often determined by regulation, ROA emerges as the key ratio for the evaluation of bank profitability (Gracia et al., 2009).

The Return on Asset and Return on Equity taken as dependent variable in order to measures the performance with respect to the bank specific factors and Macroeconomic Indicators.

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Notation</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return On Asset</td>
<td>ROA</td>
<td>Net Income/Total Asset</td>
</tr>
<tr>
<td>Return On Equity</td>
<td>ROE</td>
<td>Net Income /Total Equity</td>
</tr>
</tbody>
</table>

Table No.1

ii. Independent Variables

For independent variables seven bank specific factors and three macroeconomic indicators selected to measure the relation with profitability of the Pakistan’s Commercial banks.

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>Notation</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>LogA</td>
<td>Log of Total Assets</td>
</tr>
<tr>
<td>Capital adequacy</td>
<td>CA</td>
<td>Total Equity / Total Asset</td>
</tr>
<tr>
<td>Loan</td>
<td>L</td>
<td>Short term and long term loan / sum of Asset</td>
</tr>
<tr>
<td>Deposits</td>
<td>D</td>
<td>Short term and fixed Deposit / sum of asset</td>
</tr>
<tr>
<td>Expenses</td>
<td>EX</td>
<td>Total expenses / Total Assets</td>
</tr>
<tr>
<td>Liquidity</td>
<td>CA/CL</td>
<td>Current asset / Current liabilities</td>
</tr>
<tr>
<td>Credit risk</td>
<td>CR</td>
<td>Total nonperforming loans / Total loans</td>
</tr>
<tr>
<td>Economic activity</td>
<td>GDP</td>
<td>Annual growth rate of economy</td>
</tr>
<tr>
<td>Inflation</td>
<td>INF</td>
<td>Annual % change in consumer price</td>
</tr>
<tr>
<td>Foreign direct investment</td>
<td>FDI</td>
<td>FDI is a direct investment into production or business in a country by a company in another country</td>
</tr>
</tbody>
</table>

Table No.2

b) Research Approach

The research study of Saunders, Lewis and Thorn hill’s (2008) describes two common approaches: Deductive and Inductive approach. The study of Saunders et al. (2008) identified that deductive reasoning is narrower in nature and is concerned with testing or confirming hypotheses. It works from the more general to the more specific. Sometimes this is informally called a "top-down" approach. Inductive approach works the other way, moving from specific observations to broader generalizations and theories. Sometimes call this a "bottom up" approach. It begins with specific observations and measures begin to detect patterns and regularities, formulate some tentative hypotheses that we can explore, and finally end up developing some general conclusions or theories.

Robson (2002) explains the 5 steps of deductive research:

- Explore assumptions/hypothesis with one of the research strategy.
- Shows the relationship between two variables to describe the assumptions/hypothesis in operational conditions.
- Testing hypotheses.
- Examining the outcomes of hypothesis
- Revise the outcomes of hypothesis.

Deductive type approach has been selected for this quantitative study with the creation of hypotheses to test their model, hypothesis and operational terms. With this approach, the relationship between bank specific
factors, economic indicator and performance has tested.

c) Research Objectives

The basic types of research objectives includes: explanatory, descriptive and explanatory (Deloof, 2003).

Robson (2002) stated that exploratory study is the effective method to explore or find out the new insights and concepts. This is helpful for resolving the problem that is unsure. The study of Ibe (2013) discuss that descriptive studies helps you to collect the data and answer the research objectives which you want to study. Already existing literature is used to form the hypotheses about impact of bank specific factors on profitability and economic indicator on lending activity and these hypotheses are tested by data. However Saunders et al., (2008) described that explanatory or causal study focus over the cause and effects of one thing over the others. This study is causal in nature as it implies the cause and effect relationship between bank specific factors, economic indicators, profitability and lending activity. It is also descriptive in nature because this research is mainly quantitative and it describes the data and its characteristic. It explores the existing phenomenon by using statistical techniques. Therefore explanatory study and descriptive method is the best way to describe the purpose of this research.

d) Research Design

A longitudinal study is an observational research method in which data is gathered for the same subjects repeatedly over a period of time. Longitudinal research projects can extend over years or even decades. This research study is longitudinal because it tracks the banks performance from year 2010 to year 2014. According to Yin (2003) seven strategies are applied to descriptive, exploratory and explanatory stage which is: specific case study, action research, experiment, survey, ethnography, grounded theory, and archival research. Some strategies are used for inductive approach and some of them are used for deductive approach. Archival research strategy has been chosen for this research in which secondary data is the main source of data (Saunders et al., 2008).

e) Sampling

In today’s world economic growth of a country depends on its financial sector especially banking institutions working in that country. This study is conducted to examine the determinants of financial performance of both banking sectors running at the same time in Pakistan i.e. Conventional Banks and Islamic Banks. For this purpose a sample of 10 Banks are selected including five Conventional and five Islamic Banks. Data of these 10 banks are obtained of 5 years from 2010-2014 from their Audited Annual Financial Statements i.e. Income Statement and Balance Sheet. In Pakistan Commercial banks include twenty nine (29) conventional and five (5) Islamic banks (SBP, 2012). Out of these only twenty three (23) banks are listed at stock exchanges (ISE, 2014; KSE, 2014; LSE, 2014). So five conventional banks (HBL, UBL, ABL, MCB, and NBP) and five Islamic banks (Meezan Bank, Burj Bank, Dubai Islamic Bank, Bank Islami, Al Barka) have been included in the sample. In this research the purposive or judgmental sampling is used. Purposive sampling is form of non probability sampling in which probability of each sample is known so it would be possible to answer the research questions or testing hypotheses with statistic.

<table>
<thead>
<tr>
<th>No</th>
<th>Acronym</th>
<th>Conventional banks name</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ABL</td>
<td>Allied Bank Ltd.</td>
<td><a href="http://www.abl.com">www.abl.com</a></td>
</tr>
<tr>
<td>2</td>
<td>UBL</td>
<td>United Bank Ltd.</td>
<td><a href="http://www.ubl.com">www.ubl.com</a></td>
</tr>
<tr>
<td>3</td>
<td>HBL</td>
<td>Habib Bank Ltd.</td>
<td><a href="http://www.hbl.com">www.hbl.com</a></td>
</tr>
<tr>
<td>4</td>
<td>MCB</td>
<td>Muslim Commercial Bank</td>
<td><a href="http://www.mcb.com">www.mcb.com</a></td>
</tr>
<tr>
<td>5</td>
<td>NBP</td>
<td>National Bank Of Pakistan</td>
<td><a href="http://www.nibpk.com">www.nibpk.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Acronym</th>
<th>Islamic banks name</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>MEBL</td>
<td>Meezan Bank Ltd.</td>
<td><a href="http://www.meezanbank.com">www.meezanbank.com</a></td>
</tr>
<tr>
<td>7</td>
<td>BBL</td>
<td>Burj Bank Ltd.</td>
<td><a href="http://www.bblbank.com">www.bblbank.com</a></td>
</tr>
<tr>
<td>8</td>
<td>DIB</td>
<td>Dubai Islamic Bank</td>
<td><a href="http://www.Dubaislamicbank.com">www.Dubaislamicbank.com</a></td>
</tr>
<tr>
<td>9</td>
<td>BI</td>
<td>Bank Islami</td>
<td><a href="http://www.bankislami.com">www.bankislami.com</a></td>
</tr>
<tr>
<td>10</td>
<td>ALB</td>
<td>Al Barka</td>
<td><a href="http://www.albankabank.com">www.albankabank.com</a></td>
</tr>
</tbody>
</table>

f) Data Collection

The data is collected through secondary sources. Annual balanced panel data of selected banks for 5 years (2010-2014) is used in this study. Macroeconomic data has been taken from World Bank Publication (WDI, 2014), and Economic Survey of Pakistan (2010-2014). Data for ratio analysis is obtained from financial statements of banks through; concerned websites. All bank level financial data (In thousands and Rupees) is converted to Pakistani Rs. (Millions) for accurate and standardized estimation.

g) Data Analysis Technique

Two most important statistical techniques are used to examine the relationship of dependent variable and independent variables. These techniques are the Bivariate correlation and multiple regression analysis of the ratios because literature suggests that it is valid method where variables show stable relationship across
the bank (Gul, Irshad & Zaman, 2011). The data analysis is performed through Microsoft Excel and SPSS.

### Ratio Analysis

#### 1) HABIB BANK LIMITED

<table>
<thead>
<tr>
<th>Ratios</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CREDIT ADEQUACY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital adequacy ratio</td>
<td>14.61</td>
<td>15.62</td>
<td>15.31</td>
<td>15.39</td>
<td>16.25</td>
</tr>
<tr>
<td><strong>LOAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total loan/Total assets</td>
<td>0.50</td>
<td>0.40</td>
<td>0.31</td>
<td>0.33</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expense/total assets</td>
<td>0.03</td>
<td>0.03</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Financial assets/Total assets</td>
<td>0.03</td>
<td>0.04</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Total loan/Total assets</td>
<td>0.50</td>
<td>0.40</td>
<td>0.31</td>
<td>0.33</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>SIZE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Investment /total assets</td>
<td>0.28</td>
<td>0.37</td>
<td>0.49</td>
<td>0.48</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>DEPOSIT</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposit/Assets</td>
<td>0.81</td>
<td>0.82</td>
<td>0.75</td>
<td>0.82</td>
<td>0.82</td>
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<tr>
<td><strong>LIQUIDITY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loan/Deposits</td>
<td>0.62</td>
<td>0.49</td>
<td>0.41</td>
<td>0.40</td>
<td>0.39</td>
</tr>
<tr>
<td>Return on assets</td>
<td>1.9</td>
<td>2.16</td>
<td>2</td>
<td>1.38</td>
<td>1.78</td>
</tr>
<tr>
<td><strong>PERFORMANCE</strong></td>
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</tr>
<tr>
<td>Return on equity</td>
<td>18.86</td>
<td>21.7</td>
<td>21</td>
<td>18</td>
<td>20</td>
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<tr>
<td><strong>CREDIT RISK</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total NPL / Total loans</td>
<td>3.26</td>
<td>2.7</td>
<td>2.68</td>
<td>2.5</td>
<td>2.55</td>
</tr>
</tbody>
</table>

#### 2) ALLIED BANK LIMITED

<table>
<thead>
<tr>
<th>Ratios</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CREDIT ADEQUACY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total capital/total risk weighted assets</td>
<td>13.84</td>
<td>13.43</td>
<td>16.17</td>
<td>17.85</td>
<td>19.75</td>
</tr>
<tr>
<td><strong>LOAN</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total loan/Total assets</td>
<td>0.56</td>
<td>0.47</td>
<td>0.43</td>
<td>0.36</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total expense/total assets</td>
<td>0.09</td>
<td>0.09</td>
<td>0.08</td>
<td>0.07</td>
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5) UNITED BANK LIMITED

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6) MEEZAN BANK

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7) BURJ BANK

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</tr>
<tr>
<td>LIQUIDITY</td>
<td>Loan/deposits</td>
<td>0.15</td>
<td>0.15</td>
<td>0.19</td>
<td>0.22</td>
<td>0.33</td>
</tr>
<tr>
<td>PERFORMANCE</td>
<td>Return on assets</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>CREDIT RISK</td>
<td>Total NPL / Total loans</td>
<td>1.15</td>
<td>1.12</td>
<td>1.27</td>
<td>1.24</td>
<td>2.01</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10) BANK ISLAMI</th>
<th>Ratios</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAPITAL ADEQUACY</td>
<td>Total capital/total risk weighted assets</td>
<td>19.5</td>
<td>17.18</td>
<td>15.13</td>
<td>15.37</td>
<td>16.7</td>
</tr>
<tr>
<td>LOAN</td>
<td>Total loan/Total assets</td>
<td>0.11</td>
<td>0.08</td>
<td>0.13</td>
<td>0.09</td>
<td>0.19</td>
</tr>
<tr>
<td>EXPENSES</td>
<td>Total expense/total assets</td>
<td>0.04</td>
<td>0.04</td>
<td>0.03</td>
<td>0.03</td>
<td>0.03</td>
</tr>
<tr>
<td>SIZE</td>
<td>Financial assets/Total assets</td>
<td>0.43</td>
<td>0.42</td>
<td>0.37</td>
<td>0.44</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>Total loan/Total assets</td>
<td>0.11</td>
<td>0.08</td>
<td>0.13</td>
<td>0.09</td>
<td>0.19</td>
</tr>
</tbody>
</table>
### Total Investment / total assets

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPOSIT</td>
<td>0.30</td>
<td>0.36</td>
<td>0.39</td>
<td>0.36</td>
<td>0.30</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>0.85</td>
<td>0.86</td>
<td>0.86</td>
<td>0.87</td>
<td>0.89</td>
</tr>
<tr>
<td>PERFORMANCE</td>
<td>0.12</td>
<td>0.79</td>
<td>0.46</td>
<td>0.23</td>
<td>0.33</td>
</tr>
<tr>
<td>CREDIT RISK</td>
<td>2.15</td>
<td>1.48</td>
<td>2.20</td>
<td>1.84</td>
<td>2.45</td>
</tr>
</tbody>
</table>

### Deposit/Assets

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEPOSIT</td>
<td>0.85</td>
<td>0.86</td>
<td>0.86</td>
<td>0.87</td>
<td>0.89</td>
</tr>
</tbody>
</table>

### Loan/Deposits

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIQUIDITY</td>
<td>0.12</td>
<td>0.79</td>
<td>0.46</td>
<td>0.23</td>
<td>0.33</td>
</tr>
</tbody>
</table>

### Return on equity

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERFORMANCE</td>
<td>0.99</td>
<td>8.28</td>
<td>5.78</td>
<td>3.38</td>
<td>5.35</td>
</tr>
</tbody>
</table>

### Total NPL / Total loans

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>CREDIT RISK</td>
<td>2.15</td>
<td>1.48</td>
<td>2.20</td>
<td>1.84</td>
<td>2.45</td>
</tr>
</tbody>
</table>

### Performance

**Model Specification**

In this research study, multiple regressions were used to determine the influence of each variable on the dependent variable. The regression equation is:

\[ Y = \beta_0 + \beta_1 X \]

- \( Y \) = dependent variables which ROA, ROE
- \( \beta_0 \) = constant
- \( X \) = independent variable
- \( \beta \) = value of independent variable

The model is expressed by an equation as:

\[ \text{Performance (ROA), (ROE)} = \beta_0 + \beta_1 \times \text{Size} + \beta_2 \times \text{Capital} + \beta_3 \times \text{Loan} + \beta_4 \times \text{Deposit} + \beta_5 \times \text{Credit Risk} + \beta_6 \times \text{Liquidity} + \beta_7 \times \text{Expenses} + \varepsilon \]

This equation shows the relationship between the dependent variable performance as measured by the Return on Asset (ROA) & Return on equity (ROE), the independent variables includes the (size, capital, loan, deposits, expenses, credit risk and liquidity).

\[ \text{Profitability (ROA), (ROE)} = \beta_0 + \beta_8 \times \text{Inflation} + \beta_9 \times \text{GDP} + \beta_{10} \times \text{FDI} + \varepsilon \]

This equation shows the relationship between the dependent variable performance as measured by the Return on Asset (ROA) and Return on Equity (ROE), the independent variables includes the (Inflation, GDP and FDI).

### Data Analysis

#### a) Correlation Analysis

Pearson correlation is used to measure the strength of relationship of dependent variable and independent variables. It shows the linear relationship between two sets of data. We applied correlation to all the factors affecting banks performance in Pakistan. We discussed correlation results of each factor separately. Summarized results of correlation are shown in the tables explained under each hypothesis explained separately. *Correlation is significant at the 0.05 level (2-tailed).

#### i. First Hypothesis

This hypothesis posulates that size of the bank will have an effect on the overall performance of banks in Pakistan. The proposed hypothesis is:

\[ H1: \text{There is a direct relationship between SIZE and bank’s Performance.} \]

**Correlation Results**

<table>
<thead>
<tr>
<th>Table No. 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Return on Asset</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td><strong>Return on Equity</strong></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
</tr>
<tr>
<td>N</td>
</tr>
</tbody>
</table>

The correlation analysis shows that SIZE have a positive relationship with \( r = .318 \) for ROA and \( r = .318 \) for ROE. It depicts that the larger banks are better placed than smaller banks in harnessing economies of scale in transactions to the plain effect that they will tend to enjoy a higher level of profits, means that as size of bank
increase, performance also increase. The result is significant at 0.05. In this p<.05 which means that bank size and performance has significant relation. The result is consistent to previous findings of Molyneux and Thornton (2008), Bourki (2006) and Gul et al. (2011). So Hypothesis no.1 (There is a direct relationship between SIZE and bank’s performance) is accepted.

ii. Second Hypothesis
This hypothesis assumes that capital/equity investment of the bank also has relationship with performance of banks in Pakistan. The proposed hypothesis is:
H2: There is a direct relationship between CAPITAL and bank’s performance.

Correlation Results
Table No. 2

<table>
<thead>
<tr>
<th>Return on Asset</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.521</td>
<td>.026</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>Pearson Correlation</td>
<td>.643</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

The correlation analysis shows that CAPITAL have a positive relationship with r =.521 for ROA and r=.643 for ROE .As p<0.05 so, the result is highly significant for this hypothesis. The result is consistent to previous findings of Hassan and Bashir (2003), Brooke (2008) and Rattray (2012). So Hypothesis no.2 (There is a direct relationship between CAPITAL and bank’s performance) is accepted.

iii. Third Hypothesis
This hypothesis suggests that advancement of loan have impact on performance of banks in Pakistan. The proposed hypothesis is:
H3: There is a direct relationship between LOAN and bank’s performance.

Correlation Results
Table No. 3

<table>
<thead>
<tr>
<th>Return on Asset</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.289</td>
<td>.042</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>Pearson Correlation</td>
<td>.459</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.008</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

The correlation analysis shows that LOAN have a positive relationship with r =.289 for ROA and r=.459 for ROE .As p<0.05 so, the result is highly significant for this hypothesis. The result is consistent to previous findings of Suffian (2009), Barros et al., (2008) and Zeitun (2012). In this p<.05 which means that loan and performance has significant relationship. So Hypothesis no.3 (There is a direct relationship between LOAN and bank’s performance) is accepted.

iv. Fourth Hypothesis
This hypothesis suggests that deposits of bank are linked with its performance. The expected hypothesis is:
H4: There is a direct relationship between DEPOSIT and bank’s performances.

Correlation Results
Table No. 4

<table>
<thead>
<tr>
<th>Return on Asset</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.387</td>
<td>.024</td>
</tr>
<tr>
<td>Return on Equity</td>
<td>Pearson Correlation</td>
<td>.187</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.002</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>
The correlation analysis shows that DEPOSIT have a positive relationship with $r = .387$ for ROA and $r = .187$ for ROE. As $p < 0.05$ so, the result is highly significant for this hypothesis. The result is consistent to previous findings of Grigorian and Manole (2002), Bologna (2013). In this $p < .05$ which means that deposit and performance has significant relationship. So Hypothesis no. 4 (There is a direct relationship between Deposit and bank’s performance) is accepted.

### Fifth Hypothesis

This hypothesis recommends that credit risk is connected with performance of bank. The anticipated hypothesis is:

$H5$: There is an indirect relationship between CREDIT RISK and bank’s performance.

**Correlation Results**

**Table No. 5**

<table>
<thead>
<tr>
<th>Return on Asset</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.039</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Return on Equity</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.004</td>
<td>50</td>
</tr>
</tbody>
</table>

The correlation analysis shows that CREDIT RISK have a negative relationship with $r = -.478$ for ROA and $r = -.318$ for ROE. As $p > 0.05$ so, the result is highly insignificant for this hypothesis. The result is consistent to previous findings of Gracia et al., (2009), Sasrosuwito (2011) and Said et al., (2009). So Hypothesis no. 5 (There is an indirect relationship between CREDIT RISK and bank’s performance) is accepted.

### Sixth Hypothesis

This hypothesis advises that liquidity is associated with performance of bank. The predictable hypothesis is:

$H6$: There is an indirect relationship between LIQUIDITY and bank’s performance.

**Correlation Results**

**Table No. 6**

<table>
<thead>
<tr>
<th>Return on Asset</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.765*</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Return on Equity</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.0326</td>
<td>.524*</td>
<td>50</td>
</tr>
</tbody>
</table>

The correlation analysis shows that Liquidity have a weak positive relationship with $r = .0326$ for ROA and $r = .0431$ for ROE. As $p > 0.05$ so, the result is highly insignificant for this hypothesis. The result is consistent to previous findings of Levine (2000), Dinister (2012) and Anis (2013) concluded that banks excessive liquidity can diminish profitability because liquid assets have little capacity to generate interest so the liquid assets held by banks should be adequate not the excessive. Performance trade off the banks should strive for optimal liquidity level means the banks should not have lack or excess of liquidity. So Hypothesis no. 6 (There is no indirect relationship between LIQUIDITY and bank’s performance) is accepted.

### Seventh Hypothesis

This hypothesis proposes that expenses of bank are associated with its performance. The expected hypothesis is:

$H7$: There is an indirect relationship between EXPENSES and bank’s performances.
The correlation analysis shows that EXPENSES have a negative relationship with $r = -0.478$ for ROA and $r = -0.285$ for ROE. As $p < 0.05$ so, the result is highly significant for this hypothesis. The result is consistent to previous findings of Berger and Humphrey (2003), Kosmidou (2008) and Campbell (2007). So Hypothesis no. 7 (There is an indirect relationship between EXPENSES and bank’s performance) is accepted.

**viii. Eight Hypotheses**

This hypothesis proposes that Inflation rate is negatively associated with bank performance. The expected hypothesis is:

$H8$: There is an indirect relationship between INFLATION and bank’s performance.

The correlation analysis shows that INFLATION have a negative relationship with $r = -0.330$ for ROA and $r = -0.237$ for ROE. As $p < 0.05$ so, the result is highly significant for this hypothesis. The result is consistent to previous findings of Staikouras and Wood (2003), Anthanasoglou et al., (2005) and Haskell (2012). So Hypothesis no.8 (There is an indirect relationship between INFLATION and bank’s performance) is accepted.

**Correlation Results**

**Table No. 8**

<table>
<thead>
<tr>
<th>Return on Asset</th>
<th>Pearson Correlation</th>
<th>1</th>
<th>-0.330</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.036</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

| Return on Equity | Pearson Correlation | -0.237 | 1     |
|                 | Sig. (2-tailed)     | 0.040  |
|                 | N                   | 50     | 50    |

The correlation analysis shows that GDP have positive relationship with $r = 0.220$ for ROA and $r = 0.001$ for ROE. As $p > 0.05$ so, the result is not significant for this hypothesis. The result is consistent to previous findings of Bikker and Hu (2002) and Annon (2013). So Hypothesis no. 9 (There is no direct relationship between GDP and bank’s performance) is accepted.

**Correlation Results**

**Table No. 9**

<table>
<thead>
<tr>
<th>Return on asset</th>
<th>Pearson Correlation</th>
<th>1</th>
<th>0.220</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.006</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>50</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

| Return on Equity | Pearson Correlation | 0.001 | 1     |
|                 | Sig. (2-tailed)     | 0.056*|
|                 | N                   | 50    | 50    |

The correlation analysis shows that FDI have positive relationship with $r = 0.320$ for ROA and $r = 0.056$ for ROE. As $p < 0.05$ so, the result is significant for this hypothesis. The result is consistent to previous findings of Bikker and Hu (2002) and Annon (2013). So Hypothesis no. 10 (There is direct relationship between FDI and bank’s performance) is accepted.

**x. Tenth Hypothesis**

This hypothesis proposes that Foreign Direct Investment has positive significant relationship with performance. The expected hypothesis is:

$H10$: There is direct relationship between FDI and bank’s performance.
The correlation analysis shows that FDI have positive relationship with $r = .245$ for ROA and $r = .189$ for ROE. As $p< 0.05$ so, the result is significant for this hypothesis. The result is consistent to previous findings of Hamdani (2011) and Jose Brambila (2009). So Hypothesis no.10 (There is direct relationship between FDI and bank’s performance) is accepted.

Regression Analysis

In order to investigate the relationship between several independent or predictor variables and a dependent or criterion variable, multiple regression technique is applied with confidence since both dependent and independent variable(s) are quantitative.

Regression results
Impacts of bank specific factors on bank’s performance (ROA)

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.432a</td>
<td>.510</td>
<td>.393</td>
<td>.167</td>
</tr>
</tbody>
</table>

Model summary shows the overall model fitness. R value shows that banks performance and bank specific factors (size, capital, loan, deposits, expenses, credit risk and liquidity) are correlated. For bank specific variables value of R is .432 which shows that there is correlation between performance and bank specific factors. R Square value is .51 which shows that 51% variation in performance is explained by the bank specific variable. 49 % variation in dependent variable is unexplained. The adjusted R square value is 0.393 this value is adjusted for extraneous predictor used in the model. Adjusted R square value shows that 39.3 % variation in dependent variable is explained by independent variable.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.280</td>
<td>.592</td>
<td>2.163</td>
<td>.032</td>
</tr>
<tr>
<td>SIZE</td>
<td>.177</td>
<td>.102</td>
<td>.104</td>
<td>.733</td>
</tr>
<tr>
<td>CAPITAL</td>
<td>.063</td>
<td>.100</td>
<td>.312</td>
<td>1.628</td>
</tr>
<tr>
<td>LOAN</td>
<td>.230</td>
<td>.024</td>
<td>.209</td>
<td>2.13</td>
</tr>
<tr>
<td>DEPOSIT</td>
<td>.091</td>
<td>.126</td>
<td>.123</td>
<td>.989</td>
</tr>
<tr>
<td>CREDIT RISK</td>
<td>.088</td>
<td>.242</td>
<td>-.172</td>
<td>2.09</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>.012</td>
<td>.045</td>
<td>.031</td>
<td>.263</td>
</tr>
<tr>
<td>EXPENSES</td>
<td>.248</td>
<td>.082</td>
<td>-.346</td>
<td>1.482</td>
</tr>
</tbody>
</table>

The values of unstandardized coefficients beta values are the regression equation values which help to predict dependent variable performance from independent variables (size, capital, loan, deposits, expenses, credit risk and liquidity).

Performance (ROA) = $\beta_0 + \beta_1 \times \text{Size} + \beta_2 \times \text{Capital} + \beta_3 \times \text{Loan} + \beta_4 \times \text{Deposit} + \beta_5 \times \text{Credit Risk} + \beta_6 \times \text{Liquidity} + \beta_7 \times \text{Expenses} + \epsilon$
Performance (ROA) = 1.280 + 0.104 × Size + 0.312 × Capital + 0.209 × Loan + 0.123 × Deposit + 0.172 × Credit Risk + 0.031 × Liquidity + 0.346 × Expenses + ε

The above equation shows that value of intercept \( \beta_0 \) is 1.280, this value represents that if the values of all predictors are zero then the value of profitability would be 1.280. The value of \( \beta_{10} \) which reveals that if size variable changes by 1%, there would be 10.4% change in ROA, by holding the other predictors constant. So hypothesis is accepted.

The value of \( \beta_{20} \) this shows that if capital changes by 1%, there would be 31.2% change in ROA, by holding the other predictors constant. In this \( p < 0.05 \) so there is significant relationship between ROA and capital. So hypothesis is accepted.

The value of \( \beta_{30} \) which reveals that if loan changes by 1%, there would be 20.9% change in ROA, by holding the other predictors constant. In this \( p < 0.05 \) so there is significant relationship between ROA and loan. So hypothesis is accepted.

The value of \( \beta_{40} \) which shows that if deposit changes by 1%, there would be 12.3% positive changes in ROA, by holding the other predictors constant. In this \( p < 0.05 \) so there is significant relationship between ROA and deposit. So hypothesis is accepted.

The value of \( \beta_{50} \) which reveals that if credit risk changes by 1% there would be -17.2% changes in ROA, by holding the other predictors constant. In this \( p < 0.05 \) so there is significant relationship between ROA and credit risk. So hypothesis is accepted.

The value of \( \beta_{60} \) which shows that if liquidity changes by 1%, there would be 3% change in ROA, by holding the other predictors constant. In this \( p > 0.05 \) so there is insignificant relationship between ROA and liquidity. So null hypothesis is accepted.

The value of \( \beta_{70} \) which reveals that if expenses changes by 1%, there would be -34.9% change in ROA, by holding the other predictors constant. In this \( p < 0.05 \) so there is significant relationship between ROA and expenses. So hypothesis is accepted.

Regression results

Impacts of Macroeconomic factors on bank’s performance (ROA).

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.372*</td>
<td>.241</td>
<td>.099</td>
<td>.446</td>
</tr>
</tbody>
</table>

Model summary shows the overall model fitness. \( R \) value shows that banks performance (ROA) and macroeconomic variables (Inflation, GDP and FDI) are correlated. For bank specific variables value of \( R \) is .372 which shows that there is correlation between performance and macroeconomic factors. \( R \) Square value is .241 which shows that 24.1% variation in ROA is explained by the macroeconomic variable. 75.9% variation in dependent variable is unexplained. The adjusted \( R \) square value is 0.089 this value is adjusted for extraneous predictor used in the model. Adjusted \( R \) square value shows that 9.9% variation in dependent variable is explained by independent variable.

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.088</td>
<td>.342</td>
<td></td>
<td>3.163</td>
</tr>
<tr>
<td>INFLATION</td>
<td>.157</td>
<td>.200</td>
<td>-.116</td>
<td>1.876</td>
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<tr>
<td>GDP</td>
<td>.098</td>
<td>.160</td>
<td>.066</td>
<td>2.628</td>
</tr>
<tr>
<td>FDI</td>
<td>.430</td>
<td>.039</td>
<td>.137</td>
<td>1.98</td>
</tr>
</tbody>
</table>

\( F \) value = 9.42, \( p = 0.05 \)

The values of unstandardized coefficients, beta values are the regression equation values which help to predict dependent variable performance from independent variables (Inflation, GDP and FDI).

\[
\text{Profitability (ROA)} = \beta_0 + \beta_8 \times \text{Inflation} + \beta_9 \times \text{GDP} + \beta_{10} \times \text{FDI} + \varepsilon
\]

\[
\text{Profitability (ROA)} = 1.088 + -.116 \times \text{Inflation} + .066 \times \text{GDP} + .137 \times \text{FDI} + \varepsilon
\]
The above equation shows that value of intercept $\beta_0 = 1.008$, this value represents that if the values of all predictors are zero than value of performance would be 1.008. The value of $\beta_1$ -.116 which reveals that if inflation variable changes by 1%, there would be 11.6% change in ROA, by holding the other predictors constant. In this $p<0.05$ so there is significant negative relationship between ROA and inflation. So hypothesis is accepted.

The value of $\beta_2$ 0.066 this shows that if GDP changes by 1%, there would be 6.6% change in ROA, by holding the other predictors constant. In this $p<0.05$ so there is insignificant relationship between ROA and GDP. So null hypothesis is accepted.

The value of $\beta_3$ 0.137 this shows that if FDI changes by 1%, there would be 13.7% change in ROA, by holding the other predictors constant. In this $p<0.05$ so there is significant relationship between ROA and FDI. So hypothesis is accepted.

Regression results
Impacts of bank specific factors on bank’s performance (ROE).

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.237a</td>
<td>.320</td>
<td>.203</td>
<td>.127</td>
</tr>
</tbody>
</table>

Model summary shows the overall model fitness. R value shows that banks Performance and bank specific factors (size, capital, loan, deposits, expenses, credit risk and liquidity) are correlated. For bank specific variables value of R is .237 which shows that there is correlation between performance and bank specific factors. R Square value is .320 which shows that 32% variation in performance (ROE) is explained by the bank specific variable. 68% variation in dependent variable is unexplained. The adjusted R square value is .203 this value is adjusted for extraneous predictor used in the model. Adjusted R square value shows that 20.3% variation in dependent variable is explained by independent variable.

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>SPECIFIC VARIABLE</td>
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</tr>
<tr>
<td>(Constant)</td>
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<td>.1453</td>
<td>.031</td>
</tr>
<tr>
<td>SIZE</td>
<td>.108</td>
<td>.122</td>
<td>.097</td>
<td>.833</td>
</tr>
<tr>
<td>CAPITAL</td>
<td>.045</td>
<td>.106</td>
<td>.302</td>
<td>1.568</td>
</tr>
<tr>
<td>LOAN</td>
<td>.367</td>
<td>.033</td>
<td>.201</td>
<td>2.23</td>
</tr>
<tr>
<td>DEPOSIT</td>
<td>.065</td>
<td>.112</td>
<td>.113</td>
<td>.787</td>
</tr>
<tr>
<td>CREDIT RISK</td>
<td>.048</td>
<td>.032</td>
<td>-.132</td>
<td>2.22</td>
</tr>
<tr>
<td>LIQUIDITY</td>
<td>.023</td>
<td>.042</td>
<td>.045</td>
<td>.243</td>
</tr>
<tr>
<td>EXPENSES</td>
<td>.237</td>
<td>.067</td>
<td>-.226</td>
<td>1.562</td>
</tr>
</tbody>
</table>

The values of unstandardized coefficients beta values are the regression equation values which help to predict dependent variable from independent variables (size, capital, loan, deposits, expenses, credit risk and liquidity).

Performance (ROE) $= \beta_0 + \beta_1 \times Size + \beta_2 \times Capital + \beta_3 \times Loan + \beta_4 \times Deposit + \beta_5 \times Credit Risk + \beta_6 \times Liquidity + \beta_7 \times Expenses + \epsilon$

Performance (ROA) $= 1.423 + .097 \times Size + .302 \times Capital + .201 \times Loan + .113 \times Deposit + -.132 \times Credit Risk + .045 \times Liquidity + -.226 \times Expenses + \epsilon$

The above equation shows that value of intercept $\beta_0$ is 1.423, this value represents that if the values of all predictors are zero than value of performance (ROE) would be 1.423. The value of $\beta_1$0.097 which reveals that if size variable changes by 1%, there would be 9.7% change in ROE, by holding the other predictors constant. So hypothesis is accepted.

The value of $\beta_0$0.302 this shows that if capital changes by 1%, there would be 30.2% change in ROE, by holding the other predictors constant. In this $p<0.05$
so there is significant relationship between ROE and capital. So hypothesis is accepted.

The value of $\beta_{0.21}$ which reveals that if loan changes by 1%, there would be 20.1% change in ROE, by holding the other predictors constant. In this $p<0.05$ so there is significant relationship between ROE and loan. So hypothesis is accepted.

The value of $\beta_{0.11}$ which shows that if deposits changes by 1%, there would be 11.3% positive changes in ROE, by holding the other predictors constant. In this $p<0.05$ so there is significant relationship between ROE and deposit. So hypothesis is accepted.

The value of $\beta_{0.132}$ which reveals that if credit risk changes by 1% there would be -13.2% changes in ROE, by holding the other predictors constant. In this $p<0.05$ so there is significant relationship between ROE and credit risk. So hypothesis is accepted.

The value of $\beta_{0.045}$ this shows that if expenses changes by 1%, there would be -22.6% change in ROE, by holding the other predictors constant. In this $p<0.05$ so there is significant relationship between ROE and expenses. So hypothesis is accepted.

Regression results
Impacts of Macroeconomic factors on bank’s performance (ROE)

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.202a</td>
<td>.143</td>
<td>.099</td>
<td>.344</td>
</tr>
</tbody>
</table>

Model summary shows the overall model fitness. R value shows that banks performance (ROE) and macroeconomic variables (Inflation, GDP and FDI) are correlated. For bank specific variables value of R is .202 which shows that there is correlation between ROE and macroeconomic factors. R Square value is .143 which shows that 14.3% variation in ROE is explained by the macroeconomic variable. 85.7% variation in dependent variable is unexplained. The adjusted R square value is 0.099 this value is adjusted for extraneous predictor used in the model. Adjusted R square value shows that 9.9% variation in dependent variable is explained by independent variable.

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.068</td>
<td>1.068</td>
<td>2.134</td>
<td>.000</td>
</tr>
<tr>
<td>INFLATION</td>
<td>.133</td>
<td>-.066</td>
<td>2.11</td>
<td>.032</td>
</tr>
<tr>
<td>GDP</td>
<td>.012</td>
<td>.033</td>
<td>0.628</td>
<td>.051*</td>
</tr>
<tr>
<td>FDI</td>
<td>.240</td>
<td>.169</td>
<td>1.544</td>
<td>.029</td>
</tr>
</tbody>
</table>

The values of unstandardized coefficients, beta values are the regression equation values which help to predict dependent variable performance from independent variables (Inflation, GDP and FDI).

Performance (ROE) = $\beta_{0} + \beta_{1} \times \text{Inflation} + \beta_{2} \times \text{GDP} + \beta_{3} \times \text{FDI} + \epsilon$

The above equation shows that value of intercept $\beta_{0}$ is 1.068, this value represents that if the values of all predictors are zero than value of performance would be 1.068. The value of $\beta_{1}$.006 which reveals that if inflation variable changes by 1%, there would be -6% change in ROE, by holding the other predictors constant. In this $p<0.05$ so there is significant negative relationship between ROE and inflation. So hypothesis is accepted.

The value of $\beta_{2}$ 0.033 this shows that if GDP changes by 1%, there would be 3.3% change in ROE, by holding the other predictors constant. In this $p>0.05$ so there is insignificant relationship between ROE and GDP. So null hypothesis is accepted.
The value of $\beta_3 = 0.169$ this shows that if FDI changes by 1%, there would be 16.9% change in ROE, so there is significant relationship between ROE and FDI. So hypothesis is accepted.

### c) Summarized Results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Accepted/Rejected</th>
<th>Related Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1. Size</td>
<td>Accepted</td>
<td>(Bourke, 2006), (Gull et al., 2011)</td>
</tr>
<tr>
<td>H2. Capital</td>
<td>Accepted</td>
<td>(Rattray, 2012), (Brooke, 2008)</td>
</tr>
<tr>
<td>H3. Loan</td>
<td>Accepted</td>
<td>(Zeitun, 2012), (Suffian, 2009)</td>
</tr>
<tr>
<td>H4. Deposits</td>
<td>Accepted</td>
<td>(Neceur and Gaoaded, 2005), (Bologna, 2013)</td>
</tr>
<tr>
<td>H5. Credit risk</td>
<td>Accepted</td>
<td>(Gracia et al., 2009), (Sasrosuwito, 2011)</td>
</tr>
<tr>
<td>H6. Liquidity</td>
<td>Accepted</td>
<td>(Levine, 2000), (Anis, 2013)</td>
</tr>
<tr>
<td>H7. Expenses</td>
<td>Accepted</td>
<td>(Berger and Humphrey, 2003), (Kosmidou, 2008)</td>
</tr>
<tr>
<td>H8. GDP</td>
<td>Accepted</td>
<td>(Annon, 2013), (Mancka, 2011)</td>
</tr>
<tr>
<td>H9. FDI</td>
<td>Accepted</td>
<td>(Annon, 2013), (Mancka, 2011)</td>
</tr>
<tr>
<td>H10. Inflation</td>
<td>Accepted</td>
<td>(Goldberg, 2004), (Haskell, 2012)</td>
</tr>
</tbody>
</table>

### V. Conclusion, Recommendations, Limitations and Future Implications

#### a) Conclusion

This study investigates the impact of bank-specific factors and macroeconomic indicators on bank’s performance in the Pakistan’s banks for the 2010-2014 periods. Individual bank characteristics (internal and external factors) are considered as determinants of bank performance in Pakistan. Banks with more equity capital, Size, Loans, Deposits, Expenses, Liquidity, Credit risk and macro factors i.e., economic growth, Foreign direct investment and Inflation are perceived to have more safety and such an advantage can be translated into higher performance. For this purpose, two hypotheses have been developed for analyzing bank’s performance i.e., Hypothesis 1 states that bank specific factors have significant relationship with performance. Whereas, hypothesis 2 states that microeconomic indicator have significant relationship with performance. The result shows that both hypotheses have accepted and have a significant impact on performance of the Bank’s in Pakistan. It is conform from outcomes of research study that credit risk, expenses and inflation have indirect link with the bank performance, whereas size of bank, capital, deposit and loan have a significant positive relation with bank’s performance and liquidity have insignificant positive relation with Performance of bank. So the banks should hold the optimal liquidity because the excessive liquidity and illiquidity are like financial diseases which negatively affect the banks performance (Li, 2011). To overcome the dilemma banks should strive for optimal liquidity level, means that banks should not have lack or excess of liquidity (Anis, 2013) consistent with results of (Dinster, 2012). The amount of equity capital directly related with performance because bank have more safety against uncertain shocks. In additional, our outcomes also revealed that high ratio of loan-to-total assets could also give indication of higher level of

profits. Thus management should wisely focus on credit and liquidity dealings; these should be arranged in such a way that it would enhance banks performance. Banks also ensure the sensible utilization of deposits; it also encouraged the investment of equity capital and advanced more loans for maximization of profit.

The result of GDP and liquidity shows that they have an insignificant positive relation with bank’s performance which is measure in term of ROA and ROE. The country is facing many economical and financial problems like hyper inflation, less FDI inflow and fluctuation in GDP growth, the reasons behind these problems are war of terror, poor management by government, government is indulged in unnecessary debate which is not linked directly with the welfare of general public of Pakistan and is neither helpful for the revival of the economy. These all problems are linked with the performance of all financial institutions and other organizations working in Pakistan. The positive relation between FDI inflows and performance supported by our literature review because as the foreign direct investment from a particular country increases the economic condition of a particular country gets improved, more employment opportunities increases and people have more money to repay the loans this will decrease the credit risk of a particular country and as from the study of Li(2013) it is obvious that ratio of countries investing in Pakistan is increasing resulting in increase in FDI inflow so the credit risk in Pakistan’s bank will decrease and performance of banks increases. The inverse relation between inflation and performance is observed This result is also obvious from our literature review in which a study by Haskell(2012) tells us that increase in inflation is not good for the lenders i.e. banks etc because they lend money at low interest rates which is beneficial from borrowing point of view but the credit risk for the lenders increases and from borrower’s point of view when the inflation is prevailing repayment of the loans from money is also not significant.
b) Recommendations & Suggestion

Stake holders will be able to use the facts and figures from the results of this study and locate that at which point they should withdraw their investment. By identifying the factors which affect Return on asset, new investors can critically analyzed annual financial reports of bank and will make debt or capital financing decisions in better way.

Technological innovations also play very important role in the profitability of bank and provide evidences that banks which have more advanced technologies is relatively more profitable than its competitors. The management of banking firm should encourage those factors which help to increase profit and try to overcome their liabilities.

The financial institution should maintain optimal level of Liquidity in order to avoid any issues related to liquidity. Banks can also go for factoring whether Recourse basis or Non Recourse basis in order to improve the cash management and enhancing liquidity.

The non-performing loans should be given important considerations by keen personnel’s because these affect the overall performance and position of Banks. On the basis of the loan portfolios of the banks, banks should spot their customers having permanent or timely problems regarding non repayment of loans by establishing the policies to support or enhance the chances of repayment of loans. In order to recover maximum loans banks must follow the legal procedures for the implementation of guarantees and collateral.

Government of Pakistan should pay proper attention to increase the GDP growth and FDI inflow in Pakistan and should strive harder to lower down the inflation, unemployment and financial crisis in Pakistan. If the economic, social and political conditions of Pakistan are improved it would certainly have positive impact on lending activity of banks as it is obvious from our analysis and literature review. And banks should perform stress test analysis for this reason.

Banks should also forecasts the economic activities and changing trends of the economic indicators and on the basis of these indicators they should manage the quality of their loan portfolios.

c) Limitations

One limitation of this study is that it is included five Conventional and five Islamic banks of Pakistan. The sample size of present research is 10 banks which is quite small keeping in view the scope of determinants of banking sector performance in Pakistan due to lack of time. If data is collected from all the 36 commercial banks then the scenario would be different.

Another limitation of this study is that data is totally financial and secondary in nature. So outcomes of research study drawn from the data of five years 2010-2014 period only due to availability of the data and variability of data.

Other problem is that less work by Pakistani scholars on Pakistan banking sector performance, limited a widespread analysis of the literature. Moreover, only profitability is used as the measure of performance. Industry specific factors contributing to performance are not covered in this paper.

d) Future Implications

For future research, this study can be extended to cover longer time periods. Unbalanced panel data can be used to incorporate the banks which are recently established. Quarterly data can be analyzed to reveal more precise results. Other data analysis techniques can be applied to verify the relationship.

Other internal factors like Bank charges, reserve ratios can also be included in the research for broadening its scope. Companies from other Sectors can also be taken into consideration for clear understanding of the determinants of performance. Industry specific factors with firm specific factors can also be taken for further study of this research. We can make our study more acceptable by including extra features in our analyses.

References Références Referencias


