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Evaluating Performance of Commercial Banks in Pakistan: "An Application of Camel Model"

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ABSTRACT

Banking sector plays a vital role in the economic growth. Sound financial well-being of a bank is the assurance not only to its investors, but is equally important for the owners, personnel and the whole economy as well. As a result efforts have been made from time to time, to gauge the money related position of every bank and oversee it proficiently and viably. In this paper, an effort has been made to assess the financial execution of the ten commercial banks working in Pakistan and the data has been taken for seven years i.e. 2007-2013. Moreover, data were also assembled from articles, papers, the World Wide Web (Internet), Specialized International Journals, and relevant previous studies. In the present study an endeavor was made to evaluate the execution & financial accuracy of commercial banks using CAMEL approach. CAMEL is the supervisory and administrative framework implemented by State Bank of Pakistan. It consists of five critical indicators to assess the soundness and execution of the bank. These segments are Capital adequacy, Asset quality, Management, Earning and Liquidity. The Capital adequacy, Asset quality, Management efficiency, Earning and Liquidity are taken as independent variables (financial measures) with a view to study their impact on the firm's performance. Earnings per share (EPS) is used as a dependent variable. Measurable apparatuses like descriptive statistics, Correlation and regression analysis were used to gauge the execution of the banks. The results show that total deposit to equity, non-performing loans to gross advances, non-performing loans to equity, Admin Exp to Interest Income Ratio, Gross Advances to Total Deposits Ratio were significantly but negative correlated with a bank's performance. The Return on Assets and Return on Equity were significantly and positively correlated with a bank's performance. The interest income to total assets ratio is statistically insignificant with bank's performance, whereas the regression result show that INT is statistically significant with bank's performance. The cash ratio is also showing insignificant correlated bank's performance, whereas the regression result shows that the cash ratio is statistically significant with a bank's performance.

KEY WORDS: Capital Adequacy, Asset Quality, Management Efficiency, earnings & Profitability, Liquidity, bank's performance (earning per share)

1. INTRODUCTION

Financial Sector is important for the economic development and prosperity of the country. Financial sector works as the backbone of the economy that controls the money supply. The Banks accept funding from surplus monetary units as deposits and give it to Business and Industries as advances. Banking is a very important sector because the development of the finance, and particularly the banking system, promote economic growth (Levin, 1997).Banks are important for the economy and organizations in particular at the time of declines and money related crisis. Industrial, agricultural and commercial development of a country is not imaginable without an efficient banking system. Sometimes bank truly don't respond to the crisis, comparing the later past financial crisis 2007-09, it makes the condition more terrible for economic

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improvement. Therefore, it is significant to observe the performance of the banks with the administrative prerequisites (Babar and Zeb, 2011).

The financial resources of the country can be properly utilized through banks because they serve as a backbone of the financial sector. The banking sector has attracted a huge amount of investments and expanded to a great extent. Nowadays banks are not only restricted to financial intermediary services, but also involved in providing specialized services to their customers in order to meet ever changing customer needs as the banking industry is innovating rapidly (Dang, 2011).

A bank is an institution which receives deposits from customers and gives loan to the institutions (Ally, 2013). The word bank implies an association where individuals and business can contribute or borrow money; transform it to foreign cash and so forth. As indicated by the Halsbury's Law of England "A Banker is an individual, partnership or corporation, whose sole or predominating business is banking, that is, the receipt of money on current or deposit account and the payment of cheques drawn by and the collection of cheques paid in by a customer".

Hilton Banking Commission defines Bank or Banker in the following words "Every person, firm or company using in the description or its title, Bank or Banker or Banking and accepting deposits of money subject to withdrawal by cheque, draft or order".

In the viewpoint of the above mentioned definitions, a straightforward and short definition is that the Bank is an establishment which deals in cash and credit. Furthermore a bank accepts deposits in reserve funds and current records at a lower rate of interest or benefit and gives advances to those who need it, and representatives at a higher proportion of interest or benefit. Likewise, it exchanges money for the customers across different cities and countries furthermore, it performs different other agency services for income purpose.

According to the Banking Ordinance 1962 (Pakistan)defines banking as "Accepting for the purpose of lending or investment of deposits of money from public, repayable on demand or otherwise and withdrawal by cheque, draft, order or otherwise". The significance of the financial sector in the monetary advancement can't be denied. The banking segment in its ability of intermediation between the borrower and the loan specialists facilitates the monetary exercises as a piece of the banking sector (Nazir and Alam, 2010).

Financial segment in broad and banking segment in particular is one of the energetic elements for the economic development of the country. So it is important to control and regulate bank processes by an apex Bank to make sure customer's safety, strengthen and promote soundness, stability and efficiency of the banking system. This helps to decrease the hazards of banks becoming bankrupt (Usman and Khan, 2012). Banks are well-known as financial intermediaries their role is to sell its own obligations and to buy from others. All over the world the banking segment is known for the appropriation of multidimensional techniques occasionally with fluctuating degrees of achievement. Banks are vital for the efficient functioning of budgetary markets as they serve as stores of fundamental monetary data and can conceivably alleviate the issues made by data asymmetries. Central bank needs such great disclosures for early identification of issues confronted by banks in the business and decreases the seriousness of business sector disturbances.

As per the report issued by Pakistan and Gulf economist on FEB 21st, 2015, the banking industry of Pakistan consists of 55 banks that include 5 public sector banks, 5 Islamic banks, 17 private banks, 6 foreign banks, 8 development financial institutions, 4 specialized banks and 10 micro finance banks.

Above mentioned banks provide a diverse type of products and services to their customers in order to attain long term growth. If the financial segments do not perform well and maintain the liquidity for unseen events than they can take cash from the central bank as per rules and procedure. It is the obligation of the state bank to take quick, appropriate action to avoid the bank managers and proprietors from assuming excessive risks.

The State Bank of Pakistan has increased and strengthened its capacity by acquiring new skills, improve the quality of the existing human resource base, implementing technology and re-engineering business processes. The financial soundness indicators show a healthy and sound banking system with a high degree of financial stability. Pakistan's Banking sector adopted some changes which were presented in the early 1990s and transformed into a decently sorted out, sound and strong accounting framework. The most recent extensive evaluation done mutually by the World Bank and IMF in 2004 reached at the following conclusion "For arriving at changes have brought about a more viable and focused money related framework specifics. The essential government managing an accounting framework has been changed into one that is overwhelmed under the control of the private division. The lawmaking system and the State Bank of Pakistan's directing limit have been enhanced essentially. Because of this, the money related division is sounder and shows an expanded strength to stuns."

Formally banking begins in Pakistan during the time of British pioneers in the South Asia. After autonomy from the British Raj in 1947, and the origin of Pakistan as a country in the globe, the extent of banking segment in Pakistan has been expanding and stretching continuously. Pakistan's most seasoned bank is the State Bank of Pakistan, which is also the central bank of the country. Before freedom on August 14, 1947, the Reserve Bank of India was the national bank of what is presently Pakistan. After freedom, Muhammad Ali Jinnah took activities to secure a national bank in Pakistan, which brought about the new establishing of the State bank of Pakistan, with its home office to be situated in Karachi. Just 7% of the population utilizes the banks, has enormous potential yet this needs to be pushed somewhat further. Thus, the efficient performance of the banking sector is imperative for the smooth functioning of the Pakistan economy.

The research describes the financial performance of the banking segment by utilizing CAMEL model including Capital adequacy, Asset quality, Management efficiency, Earnings & Profitability and Liquidity to assess the financial performance. The significance of this study is valuable for helping business financiers to know the qualities and shortcomings for defining methodologies and polices that will push a successful and sound money framework. Regulators have enlarged bank supervision by utilizing CAMEL model to evaluate and assess the performance and financial soundness of the bank's activities (Misra and Aspal, 2013).

The CAMEL Model was developed in 1979. This model is recommended by the US Federal Reserve and the Uniform Financial Institutions Rating System (UFIRS). This model was employed in the US financial institutions and then all around the world. This model consists of five indicators that are Capital adequacy, Asset quality, Management efficiency, Earnings & Profitability and Liquidity. The CAMEL framework emphasizes on the five parameters of the banking system by looking at its profit and loss statement to assess financial performance and balance sheet to assess the financial position of the banks (TOM, 2012). CAMEL model is basically a methodology commonly used to measure the performance of banking segment in and outside India (Trivedi, 2011). The different researchers have analyzed the overall financial performance of major private sector banks in India through the application of CAMEL Model (Gupta and Verma, 2008).

Aspal and Dhawan (2014) analyzed the performance of banks in India, Reserve Bank of India has prescribed two supervisory models (Capital Adequacy, Asset Quality, Management, Earning, Liquidity, Systems and Controls) and CACS (Capital Adequacy, Assets Quality, Compliance, Systems and Controls). The study focused on the CAMEL model to assess the performance of Old Private Sector Banks in India. The CAMEL model is very famous among controllers because of its effectiveness. This model is very good for the evaluation of the performance of the banks. CAMEL model was implemented by North America Bank regulators to judge the financial and administrative reliability of commercial loaning organizations. This model assesses the general condition of the bank, its qualities and shortcomings (Gaytan and Johnson, 2002).

Numerous researchers have conducted research to assess the performance of commercial banks by adopting the CAMEL model. Bodla and Verma (2006), Gupta and Kaur (2008), Dash and Das (2009), Kaur (2010) have investigated the performance of Indian public sector banks, private sector banks and foreign banks by using the different ratios in CAMEL model. The time period of their studies was different, however the findings reached by them was more or less similar. Sushendra and Kumar (2013) used CAMEL framework and they have broken down the performance of the State bank of India group. They utilized different ratios to gauge the State bank group's performance under each of the CAMEL parameters and presumed that a State bank of Travancore secured first position in all classifications. The real disadvantage of the study was that it was restricted to the state bank group.

CAMEL is a systematic methodology recommended by Moody's to evaluate a bank's general security, solidness and soundness. Banks are performing essential and a significant part in economic and capital development because of the inborn nature, in this way banks ought to be given more consideration than whatever other kind of the monetary unit in an economy. Assessment of financial performance of the banking sector is a powerful measure and pointer to check the soundness of economic activities of an economy. The five parameters of the CAMEL model used to evaluate the operating soundness, financial performance, financial condition and regulatory compliance of the banking organization (Gupta, 2014).

CAMEL model is essentially a proportion based model utilized for assessing the performance of banks and is utilized for ranking or rating of the banks. CAMEL model is the instrument which is utilized in the critical investigation of the statement of financial position of banks and the presentation of such examination to provide the evaluation of the strength of the banks. In the present examination work, CAMEL model has been utilized as a measuring rod to gauge the Capital adequacy, Asset quality, Management efficiency, Earnings and Liquidity of five nationalized banks (Nag and Khatik, 2014).The performance of the banking segment under CAMELS model, which includes analysis and assessment of the five fundamental dimensions of banking operations. Thus the CAMEL model includes set of performance measures that provide a comprehensive view of the banks (Nimalathasan, 2008).

According to the Lakhtaria (2013) Ratio examination is the best tool for investigating the performance and productivity of the banking sector. The CAMEL indicators include Capital adequacy, Asset Quality, Management efficiency, Earnings and Liquidity. According to the previous studies, it is clear that there are many studies carried out on banks in different countries. However, a detailed study has not yet been carried out in Pakistan to assess the performance of the banks. The purpose of this research is to analyze the Financial Performance of the 10 Commercial Banks working in Pakistan by adopting the CAMEL Model. It is an appropriate and simple model to evaluate the financial and managerial assessment of institutions based on Capital adequacy, Asset quality, Management efficiency, Earnings and Liquidity (Kouser and Saba, 2012).

Controllers have enlarged bank supervision by utilizing CAMEL (Capital adequacy, Asset quality, Management competency, Earnings and Liquidity) model to evaluate and assess the performance and monetary soundness of the exercises of the bank. CAMEL is an acronym for a rating model through which banks are evaluated and given a rating focuses on the premise of different parameters (Babar and Zeb, 2011).

1.2 Gap Analysis:

Banking sector acts as a backbone of the economy. The Financial resources of the country are allocated through banks. Moreover, banking sector acts as a heart through which money is injected into the economy. Therefore, it needs continuous performance evaluation. CAMEL model is a useful tool for performance evaluation and examining the soundness of banks. After 1980s noticeable loan losses occurred and banks collapsed, therefore, need of banking supervision has increased (Dang, 2011). This model is used worldwide. In developed countries a lot of research has been carried out on the application and usefulness of camel model. In Pakistan there is no significant research carried out by utilizing Camel Model. Scholars in Pakistan used camel Model as ratio analysis by comparing one bank to another bank or one sector to another sector to find out the performance of the banks. They didn't find out the impact of the CAMEL model on bank performance. Alam, Raza and Akram, (2011) made comparison of public vs private commercial banks. Usman and Khan, (2012) evaluated the performance of Islamic and conventional banks. Shar, Shah and Jamali, (2010) evaluated bank performance pre and post nationalization of the banking sector in Pakistan by adopting the CAMEL model. Kouser, Aamir, Mehvish and Azeem (2011) adopt the CAMEL analysis of Islamic and Conventional Banks in Pakistan. In existing literature other researchers used one component of CAMEL model to measure the bank performance. Bokhari, Ali and Sultan, (2012) used one component of CAMEL model, i.e Capital adequacy to find out the impact on bank performance. The focus of this research is to analyze the impact of different components of the CAMEL Model on the performance of 10 commercial banks operating in Pakistan and data is taken from 2007 to 2013.

1.3 Problem statement

What are the key factors that affect bank's performance? In previous studies key factors that affect bank's performance have not been identified. In this research key factors effecting bank's performance will be analyzed.

1.4 Research Question:

In recent years, the financial system, especially the banks has undergone numerous changes in the form of reforms, regulations & norms. CAMEL's framework for the performance evaluation of banks is an addition to this. From the above problem statement, following are the questions of this research are as follow:

a) What is the impact of Capital Adequacy on the financial performance of Banks?
b) How does Asset Quality impact on the financial performance of Banks?
c) Does Managerial Efficiency influence on the financial performance of Banks?
d) How Earnings & Profitability affects the financial performance of Banks?
e) Whether or not Liquidity affects the financial performance of Banks?

1.5 Scope of Research:

The scope of the research is restricted to the ten commercial banks operating in Pakistan due to the unavailability of data and time constraints. This study aims to evaluate financial performance by focusing on all five parameters of Camel Model i.e Capital adequacy, Asset quality, Management Efficiency, Earnings & Profitability and Liquidity. However there are different ratios that can be used to analyze these parameters.

1.6 Research Objectives:

This study is aimed to analyze the Camel model in banking sector of Pakistan during the period 2007-2013. Specifically, the following objectives of the study are:

a) To investigate the capital adequacy of selected Commercial banks.
b) To consider Asset Quality of selected Commercial banks.
c) To analyze the Management Efficiency of selected Commercial banks.
d) To explore the Earning and profitability of selected Commercial banks.
e) To study the Liquidity of selected Commercial banks.

1.7 Significance of Study:

Evaluation of the organization's overall performance and observing the financial condition is essential to owners, potential investors, depositors, managers and, of course, the regulators (Al-Tamimi, 2006). The study is conducted to analyze the performance of banks with respect to a Camel model. This research is focused on CAMEL Model as it emphasizes on different indicators that are specifically important for safety and soundness of the banking industry.

This research will provide insight to shareholders and investors about the key factors that affect the bank performance. It will enhance their knowledge beyond the typical information like financial statement and disclosure which are made by banks in their annual statements. On the basis of information investors will take a more valuable decision to invest in a certain Bank.

The findings of this research will contribute to the existing literature on bank performance as well as bridge the knowledge gap currently exists related to bank performance measures available.

It will help the regulators in making appropriate rules and regulations, mitigate the potential risk of failures and take corrective actions. It will also helpful to formulate appropriate policies on how these can be improved upon.

Moreover, it will be beneficial for management to formulate a proactive strategy for survival and long term growth of the organization. It will also helpful for the reader to know the specific details of the model which in turn lead to identifying the strengths and weaknesses of the banks, it will give a better understanding and knowledge about the performance of the banking industry particularly in Pakistan. Further the study outcomes may be used as a basis for future research.

1.8 Delimitation of the Study

a. The focus of study is a commercial bank's performance operating in Pakistan only.

b. Time and resources constraints.

c. The system under examination relates just to banks, however, it can be utilized for performance assessment of other money related organizations.

d. The study is totally done on the premise of ratios ascertained from the financial records.

e. It is impractical to get an individual meeting with the top administration representatives of all banks under study.

2 REVIEW OF THE LITERATURE

2.1 General

This chapter comprises of previous studies and their findings related to the independent variables that are used in this study with respect to their relationship with the dependent variable to measure the bank's performance. The theoretical framework and hypothesis that have been drawn on the basis of the results of the past studies have also been included.

Azizi and Sarkani (2014) research is carried out to assess the performance of Mellat Bank by adopting the CAMEL model. Statistical tools were applied to analyze the data. The outcomes show that there is a significant and positive association between the indicators of liquidity, management efficiency and earnings quality with financial execution. According to the Chen (2014) the research is carried out to examine the relationship between CAMEL parameters and bank execution to advice supervisors to give careful consideration to the CAMEL model to improve competitiveness of banks.

Said and Saucier (2003)applied the CAMEL model to assess the execution of Japanese Commercial banks in terms of Capital adequacy, Asset quality, Management efficiency, Earnings ability and Liquidity position. Prasuna (2004) evaluates the performance of 65 Indian banks using the CAMEL model and conclude that innovative products, better service quality, and better bargains were beneficial because of the prevailing tough competition.

Sarker (2005) analyzed Bangali Islamic banks with the help of the CAMEL model which help the regulators to set Shariah benchmark to supervise and inspect Islamic banks and financial institutions from an Islamic perspective. Nurazi and Evans (2005) find that capital adequacy ratio, asset quality, administration, earnings, liquidity and bank size are statistically significant in explaining bank failure.

Gupta (2008) evaluates the performance of 30 Indian commercial banks adopting CAMEL model data is taken for 2003-2007 and give rating to top five and bottom five banks. According to the Goyal (2011) the CAMEL model is a tool to measure the performance of the banks in terms of Capital adequacy, Asset quality, management efficiency, Earnings quality and Liquidity. Siva and Natarjan (2011) found that the application of CAMEL framework is useful for banks in analyzing financial health, diagnoses which help in taking preventive measures, after testing the impacts of CAMEL norms on the performance of SBI Groups. Redy and Prasad (2011) applied CAMEL model for analyzing performance of rural Indian banks.

Olweny and Shipo (2011) took into account factors that result into bank collapse. They came to the conclusion that Asset Quality and Liquidity are responsible for Kenyan bank failures. Bhayani (2006)carried out research to analyze the execution of new private sector banks by adopting the CAMEL model. Four prominent private segment banks are Unit Trust of India, Industrial Development Bank of India, Housing Development Finance Establishment, and Industrial Credit &an Investment Corporation of India had been taken as a sample.

Biswas (2014) analyzes the execution of two public sector banks. The researcher compares the performance of Andhra Bank and Bank of Maharashtra by utilizing the CAMEL model. The research is carried out for the period of 2011-2013 and the data were taken from the annual reports of the banks. Kabir and Dey (2012)carried out research to measure the execution of Private, Commercial banks of Bangladesh by adopting the CAMEL Model. The outcomes show that the national banks of all around the globe have enhanced their supervision quality and methods.

Keovongvichith (2012) analyzed the performance of the Laotian Banking Sector during 2005-2010 by adopting the CAMEL model. Altan, Yusufazari and Beduk, (2014) carried out research to investigate the execution and financial soundness of state owned and private owned banks operating in Turkish for the period 2005-2012 by applying the CAMEL model. Camel model includes five important parameters that are Capital adequacy, Asset quality, Management efficiency, Earnings quality and Liquidity. According to the Mohiuddin (2014) study is carried out to assess the financial execution of the two major banks NCB and PCB operating in Bangladesh. In this research CAMEL model is utilized, the

latest model of financial analysis. The outcome shows that the position of the banks is comprehensive and satisfactory in terms of their Capital, Asset quality, Management efficiency, Earnings quality and Liquidity.

Muhmad and Hashim (2014)this research is carried out to analyze the performance of domestic and foreign bank operating in Malaysia by utilizing a CAMEL framework. The data is taken from 2008 to 2012 and regression analysis was used. The outcome shows that capital, asset quality and liquidity have a significant effect on the execution of Malaysian banks.

Ebrahimi, Nasab and Javaheri (2015) analyze the effect of Privatization of Banks on CAMEL Model. The data is taken from 2004 to 2014 and T-test is used to examine the data. The result demonstrates that privatization has significant effect on ratio of return on equity and asset quality and other indicators CAMEL are not changed. Gebba and Ahmed (2013) analyze the execution of privatized financial institutions operating in Egypt by utilizing the CAMEL model. The outcome reveals that there is a significant difference between the performance of the banks before and after privatization. Mishra (2012) analyzed the performance of different Indian public and private sector banks over the decade 2000-2011 using CAMEL approach and found that private sector banks are at the top of the list, with their performances in terms of soundness being the best.

2.2 EPS

Earnings per share show the return earned per share. This proportion measures the market worth of the shares of the organization (Banks). Higher earnings per share show better future prospects of the Banks. EPS shows whether the acquiring force of the bank has expanded or not (Tripathi, Meghani and Mahajan, 2014).

This proportion shows the productivity of the firm on per Equity Share basis. This proportion measures the income available to an equity shareholder on a per share basis (Chisti, 2012).Furthermore, earnings per share (EPS) show how much income has been produced per share of stock amid the reported period. As an organizations income increase, earnings per share looks better and the firm issue more shares, increases the quantity of shares outstanding (Gyimah and Oscar, 2011). Earnings per share can be calculated as net income divided by the aggregate number of shares outstanding (Brigham and Houston, 2007).

Earnings per share or (EPS) show a part of any company's total earnings, its net taxes, dividends on preferred stock, that are allocated to each share of common stock. EPS can be calculated by dividing net income earned by the company in a specific reporting period. (Normally it is quarterly or annually) by the total number of shares outstanding during the same reporting period. For the reason number of outstanding shares may be fluctuate. So a weighted average is generally used. E.g., a company ABC reported its net income of $6 Million and its number of shares outstanding during that time was 15 Million, after calculation it shows an EPS of $0.40 of the company for that period.

EPS = 6,000,000/15,000,000 shares = **$0.40**

According to past studies on EPS, it shows that EPS as a forecaster of share price has produced mixed results. EPS can be considered as a significant predictor when the firm increases its EPS repeatedly over a longer period of time. So many news releases have reported that so many firms did not see any increase in the share price even though their quarterly EPS increased. So it indicates that EPS might not be a good quality forecaster for share prices for a shorter period of time (Irungu, 2013).

Earnings per share is an important factor which analyzing the impact of financial leverage on a firm (Thaddeus and Chigbu, 2012).

Earnings per share is the measure of income every outstanding share of an organization's stock (Masum, 2014). The equity stockholders are the sole claimants of the net incomes of the company after giving outflows of dividend to the preference stockholder. The importance of this proportion is that higher the earnings per share, the more is the possibility for a greater rate of dividend and also of retained earnings, to build up the internal strength of the corporation, consequently greater EPS would increase the market price and the other way around (Srinivasan, 2012).

An earnings per share is a ratio which the stockbrokers and financiers will watch sensibly and deliberate it while determining the market worth of the equity share. Earnings per share is calculated as net income minus dividends on preferred stocks and then divided by average outstanding shares. The income received by a corporation after meeting cost of manufacture, then interest, devaluation and tax goes to the equity shareholders. These earnings are referred to as earnings per share (Bhatt and Sumangala, 2012). EPS is a sequence proportion of income after tax divided by issued common stocks. EPS shows the amount that is going to be distributed among shareholders. EPS reflects future income or capital gain or loss (Silviana and Rocky, 2013).

2.3 Capital Adequacy

The capital adequacy proportion is a complete index to mirror the danger of banks, additionally the bank's resource-obligation administration some of the benchmark targets. In handy utilize, the banks are not just utilizing the capital adequacy degree to gauge their own danger, additionally through this objective correlation of the pointers with industry, so that the capital adequacy proportion has a general importance (Yuanjuan and Shishun, 2012).Capital adequacy refers to the measure of value capital and different securities which a bank holds as stores against hazardous resources as a support against the probabilities of bank disaster (Ezike and Mo, 2013).The "Basle Committee" (focused on the Bank for International Settlements), which was initially settled in 1974, is a panel that speaks to national banks and financial

supervisory powers of the major industrialized countries (the G10 nations). The board of trustees frets about guaranteeing the power supervision of banks on a worldwide premise by setting and advancing universal norms. Its central hobby has been in the territory of capital adequacy proportions.

In 1988, the board issued an announcement of standards, managing capital adequacy degrees. This announcement is known as the "Basle Capital Accord". It contains a prescribed methodology for computing capital adequacy proportions and suggested the least capital adequacy degree for universal banks. The Accord was produced so as to enhance capital adequacy degrees (which were thought to be too low in a few banks) and to help institutionalize the universal administrative practice. It has been embraced by the OECD nations and numerous creating nations. The Reserve Bank applies the standards of the Basle Capital Accord in New Zealand. Post the money related emergency, there has been a rise in regulation and diverse steps taken to save the breakdown of banks and make the country's economy robust to endure slowdowns. The Capital structure is likewise a vital variable in deciding imports and trades. Rating models in view of a framework called CAMEL (Capital adequacy, Asset quality, Administration, Profit, Liquidity) was actualized to help the RBI recognize the banks that required help. It is paramount, that here, Capital Adequacy was thought to be a top component. It is the extent of Entire Capital (worth) to the danger weighted assets (Narasimhan and Goel, 2013). Various examination studies have highlighted the essentials of the CAR (Capital Adequacy Ratio) in keeping money area.

The financial structure of the money related establishments is not the same as the capital structure of the non-monetary organizations because of the administrative effect on the money related foundations; most likely because of the certainties that are installed in light of the fact that structure, capacities and targets of banks are truly unique in relation to non-budgetary organizations. In this way literature recognizes the three classes through which CAR (Capital Adequacy ratio)and its determinants can distinguish these are; inner bank strategies and considerations, market forces, and the administrative prerequisites (Cecchetti and Li, 2005).

In recent years, financial emergencies have become to be progressively regular and progressively extravagant to manage. Prudential regulation of banks is supposed to avoid and reduce the occurrence of such emergencies. The group of concerns that vanishes under the heading of bank capital adequacy has gotten a lot of consideration from regulators, bankers and scholastics in recent years and is likely to proceed as a subject for civil argument for a long time to come (Buyuksalvarc and Abdioglu, 2011). Administrative prerequisite is vital part which majorly contributes the Capital Adequacy Ratio (CAR) in the banking segment. Administrative power set the CAR which gets to be committed to the banks to conform to that base degree.

In CAR determination administrative pressure is essentially variable, however, State bank of Pakistan decides the capital adequacy degree, yet in the couple of countries capital adequacy proportion is situated out by the agencies and supervisory advisory groups for bank to bank (Bokhari, Ali and Sultan, 2012).The Basle Capital Accord is a worldwide standard for the figuring of capital adequacy degrees. Accord prescribes least capital adequacy proportions that banks ought to meet. The Reserve Bank applies the basic norms indicated in the Accord to banks enlisted in New Zealand. This serves to advance strength and productivity in the money related framework, and guarantees that banks conform to by and large acknowledged universal benchmarks. In the banking sector, capital is usually controlled by a State Bank of the country in order to mitigate bank solvency problems**.**

It is the ratio which safeguards the banks against excess leverage, bankruptcy and keeps them out of trouble. This is the index administrative establishments utilization to focus the ideal measure of cash (i.e. Equity, retained earnings, and other reserves)that a bank must have the capacity to take certain levels of danger imperiling deposit funds, or its presence (Charles and Kenneth, 2013).Capital adequacy ratio (CAR) is one of the measures which guarantee the monetary soundness of banks in retaining a sensible measure of misfortune (Fatima, 2014).It is defined as the ratio of bank's capital in relation to its current liabilities and risk weighted assets. Risk weighted assets are a measure of amount of bank assets, adjusted for risks. Capital adequacy of a commercial bank can be measured by computing a number of ratios, such as, capital adequacy ratio, return on equity, leverage ratio and net worth protection (Kabir and Dey, 2012).

An appropriate level of capital adequacy ensures that the bank has sufficient capital to expand its business, while at the same time its net worth is enough to absorb any financial downturns without becoming bankrupt. It is the ratio which defines the bank's capability to meet the time liabilities and other risks such as credit risk, market risk, operational risk (Sangmi, 2010). According to the State Bank of Pakistan all banks must have a minimum capital adequacy ratio of 10% so those banks whose CAR is at present less than 10% are advised to meet the shortfall so they can easily operate their functions effectively and efficiently. The Capital base of money related foundations encourage contributors in shaping their danger observation about the establishments. Additionally, it is the key parameter for financial managers to keep up sufficient levels of capitalization.

Additionally, other than engrossing unanticipated stuns, it flags that the foundation will keep on honoring its commitments. Capitalism is the foundation of bank's quality, and it gives a method for reacting to opportunity and much of the time, goes about as a cushion against instability, unanticipated misfortunes, and in the occasion of distinctive zones to keep working whist issues are being determined. Capital has been utilized as the best parameter for measuring banks' execution and the measure of capital a bank has on its balance sheet decides the soundness and strength of the bank and its capacity to shield its moneylenders from the vulnerabilities of the economy (Mathuva, 2009).A popular indicator of capital adequacy is Total Deposit to Total Equity ratio.

2.3.1 Total Deposit to Total Equity ratio

The part of the deposit in the budgetary structure is essential (Moussu and Romec, 2013).Funds placed into an account at a financial institution to raise the credit balance of the account. Down payment installment gave ahead of time to back the plan to finish a commercial transaction. A bank deposit means the placement of funds in an account with a bank or other budgetary establishment. Bank Deposits are the primary way of funding and this is considered as the cheaper cost of funds. The more deposits will be changed into advances, the higher the interest margin and benefit. In this manner deposits have positive impact on productivity of the banks (Alpera and Anbar, 2011).

The basic purpose of bank deposit is to create a maturity mismatch between its resources and obligations by obtaining funds from the general public having excess funds and allocating these funds in the form of loans to the side in deficit. In the event that it is expected that banks have the capacity to contribute their money at the market interest rate, they make benefits from both deposits and credits by paying rates beneath the market rate to investors and charging rates over the market rate from the borrowers (Tynys, 2012).The underdeveloped countries are facing a lot of challenges and poverty. In Nigeria the financial system and specifically the bank deposits have been identified as a key component in the growth process and poverty mitigation. Bank deposits in emerging countries play a vital role and assist in economic expansion (Ogege and Shiro, 2013).

Bankdeposits have a significant relationship with market share. Banks having a higher market share are in a better position to attract more deposits. Due to increased market share they are safer and mitigate the element of risk in deposit growth (Kunt and Huizinga, 2012).

Deposits are usually known as an inexpensive source of funds instead of borrowings and other similar financial instruments. In order to avoid bank failures, it is important for banks to maintain a significant level of capital adequacy. When deposits expand, banks ought to be more managed and controlled to ensure the depositors rights, and to shield a bank from bankruptcy (Buyuksalvarci and Abdioglu, 2011).

According to Soyemi, Akinpelu and Ogunleye (2013) banks perform as a financial mediator, play a vital role in converting deposits into financial resources, they obtain funds from individuals with excess liquidity and lend to those with insufficient liquidity thereby facilitating capital formation and trade. Biswas and Koufopoulos, (2013) demonstrate that better observing incentives (due to higher capital) fascinates more deposits and hence surplus extraction.

Total deposit consists of foreign exchange deposit, time deposit and Demand deposit (Chen, Chiu and Huang, 2010). Demand deposits are the placement of funds into a record that permits the investor to withdraw his or her finances from the record without notice or with under seven day's notification. Checking accounts are demand deposits. They allow depositors to withdraw funds whenever, and there is no restriction on the quantity of transactions an investor can have on these accounts (Tynys, 2012)

Fundamentally the time deposit is an enthusiasm-bearing investment account kept up by a bank or fiscal foundation for a fixed term whereby the depositor can withdraw the deposits when giving a notification. Time deposits by and large allude to investment accounts and banks and cash related establishments as a general rule oblige 30 days warning for withdrawal of these deposits. Individuals and associations consistently consider time deposits as "cash" or speedily open funds in spite of the way that they really are not payable on demand. The warning essential furthermore suggests that banks may study a discipline for withdrawing before a predefined date. Time deposits may pay high intrigue rates than interest deposits.

The study with respect to Gulf Corporation Council (GCC) banks by Alkassim (2005) finds that the higher capital proportion supports the productivity of Islamic banks. For conventional banks, deposits have direct connection; however, deposits of the Islamic banks have a negative effect on the profitability of banks. Anyhow, the advances have a positive impact on the profitability of both Islamic and conventional banks.

Hunjra and Bashir (2014) carried out research to assess the financial performance of Islamic and conventional banks operating in Pakistan. They used ratio analysis technique, nineteen ratios were used to measure the bank's performance and the data was taken from 2008-2012. The results of the capital ratios examination show that mean values of Total Deposits/Total Equity ratio and CCTE is higher in conventional banks than in Islamic banks. The p value shows that there is a significant difference between TDTER and CCTE of both Conventional and Islamic banks.

The division of the entire resource portfolio risk between depositors and shareholders is influenced by the total deposit/total equity ratio, representing the extent of gearing of the bank. The lower this ratio, the more likely is that the promised return to depositors can be met from the uncertain worth of the resource portfolio (Lewis and Davis, 1987).

A number of researchers have examined the impact of Capital Adequacy on the profitability in commercial banks in different countries. The results varied from one research to another as follows.

Capital proportion has long been a significant apparatus for surveying capital adequacy and ought to catch the general well-being and soundness of banks. It is by and large accepted that very much promoted banks face lower expected expenses of monetary trouble and such margin will then be interpreted into high gains. In his investigation of the determinants of banks' execution in twelve countries chosen from Europe, Australia and North America, Bourke (1989) found a significant positive connection between capital adequacy and benefit. He demonstrates that the higher the capital proportion is the more productive a bank will be.

Capital Adequacy Ratio (CAR) is utilized as independent variable. The discoveries exposed that capital adequacy proportion has a significant effect on the benefit of commercial banks in Nigeria (Abiola and Olausi, 2014).

The outcomes revealed that there is a positive relationship between capital structure and monetary execution. Furthermore, the capital structure altogether effect on money related execution of the firm demonstrated that obligation resource proportion, obligation value proportion and long term obligation corresponded with gross benefit margin (GPM), net benefit margin (NPM), Return on Capital Employed (ROCE), Return on Asset (ROA) & Return on Equity (ROE) at significant level of 0.05 and 0.1 (Nirajini and Priya, 2013).

The data investigation demonstrated a positive and significant relationship between capital adequacy and the benefit of the bank. This infers that for deposit taking banks in Nigeria, capital adequacy assumes a key part in the determination of gains. It was found that financial and productivity is the marker of bank risk administration effectiveness and mitigate against misfortunes, not secured by current income (Olalekan and Adeyinka, 2013).

Contrary to the above researchers, the outcomes portray a negative relationship between capital structure and bank execution as they show negative coefficients. The estimation of R square and balanced R square was low, and the study prescribes to be reached out to more variables as it can help to enhance the wellness of the model (Pastory, Marobhe and Kaaya, 2013).

Capital adequacy measured by EA has a significant negative effect on bank execution measured by return on equity (ROE). The outcomes are consistent with Sehrish et al, (2011) and Hoffmann (2011) who discovered a significant negative relationship in the middle of capital and bank productivity. This implies that domestic business banks are functioning over-cautiously by neglecting possible profitable endeavor. It shows that, setting up the high capital, administrative necessity has a negative effect on bank's execution, if not balanced by expanding investments (Frederick, 2015).

The regression analysis demonstrates a negative relationship between Capital Adequacy (Equity/Total Asset) and return on Asset (ROA) furthermore; this independent variable is statistically significant. This investigation recommends that when the Capital Adequacy expands, productivity will diminish. In other words, when the banks build the utilization of Equity, they will enroll more misfortunes. The clarification of this sensation can be firstly the sum they are paying to their shareholders as a dividend is greater than what they are creating from it as a benefit. Besides, the facts could confirm that they are utilizing retain earnings without putting it in a new arrangement that will give more benefit to the organization (Guisse, 2012).

The general capital adequacy proportions of the study demonstrate that Shareholders Fund/Total Assets (SHF/TA) which measures the capital adequacy of banks (danger of default) have significant negative effects on ROA (Ikpefan, 2013).

From the outcomes, the study demonstrated a negative, but significant association between the capital adequacy proportion (CAR) and execution (Return on Equity). The negative relationship suggests that, as more capital is set aside as a cradle for banks wellbeing; it influences the execution of Ghanaian banks. The results of the study, lies in the way that the negative relationship between capital adequacy and execution highlights the way that different endeavors by the controllers to audit regularly the capital base of the keeping money division is not borne out of the plan to enhance the gains of the banks. Rather to maintain stability, security against contributors and trust in the keeping money industry (Barnor and Odonkor, 2013).

2.4 Asset quality

In the banking sector, asset quality refers to a review or an evaluation, which assesses the credit risk associated with any particular assets. Such type of assets normally requires payments of interest like a loans and investment portfolios. Asset quality connotes the level of money related quality of and dangers in a bank's resources, principally advances and investments. The support of asset quality is an essential feature of bank (Gulia, 2014). Asset quality of the bank is one of the main issues whenever research on banks is conducted (Chisti, 2012). How effective management is in controlling and monitoring credit risk can also have an effect on the what kind of credit rating is given. Asset quality is a facet of bank management entails the evaluation of assets of a firm to help the measurement of the level and size of credit risk associated with its operation (Abata, 2014). The Asset quality highlights the amount of existing and potential credit risk related to the advancement and portfolios of investment, other property owned, and various assets, as well as some off-balance sheet transactions. An inspector's valuation of asset quality should consider the sufficiency of the loan and lease losses and measure the presentation to the counterparty, or debt or failure to pay under actual or implied contractual understandings. Every other risk that may influence the worth or attractiveness of the assets of an organization, which may include, however, not forced to, market, operating, strategic, reputation, or compliance risks must also be considered. One of the pointers for asset quality is the proportion of non-performing advances to aggregate credits (GNPA). The gross non-performing credits to gross advances proportion is more demonstrative of the nature of credit choices made by investors. Higher GNPA is demonstrative of poor credit choice making (Manoj, 2010).

Numerous examines like; Kunt (1989) and Barr and Siems (1994) have recognized that asset quality is a statistically important predictor of bankruptcy for the reason of bank disasters and the failing banking establishments always have high levels of non-performing advances prior to failure (Swamy, 2012).

Asset quality refers to the overall risk attached to the different assets held by an individual or an organization. This term is most usually used by banks to decide what numbers of their assets are at financial risk and how much allowance for potential losses they must have to make. The most common assets which require a strict determination of asset quality are loans, which may be non-performing assets if borrowers default on repayment commitments. Risk Managers frequently survey the quality of assets by assigning a numerical positioning to every asset depending upon the amount of risk is involved. The term asset quality and its administration decide, all things considered, the development and productivity of a firm. This is on the grounds that, the deteriorating estimation of resources specifically likewise influences different zones on the grounds that the credit misfortunes are for the most part discounted against capital (Baral, 2005).

Saksonova and Solovjova (2011) sees combining as an amalgamation or a combination in which all the joining organizations are legitimately broken down and another organization is shaped with the targets of upgrading execution through stable asset quality as one of the yardsticks.

The asset quality position measures the monetary proficiency of the business banks while the capital adequacy position measures the going concern of the business banks. However the capital adequacy position relies on upon asset quality because of incredible dangers confronting business banks, decrease in asset quality does build the capital adequacy position with a specific end goal to offer the banking protection against danger (Pastory and Mutaju, 2013).

Asset quality is a standout amongst the most basic areas in deciding the overall condition of a bank. The primary element that influences the overall asset quality is the quality of the loan portfolio and the credit organization program. Advances normally consist of a major part of a bank's assets and carry the biggest amount of risk to their capital. Securities may also contain a huge segment of the assets furthermore contain huge amount of risks. Different things which can affect asset's quality are other land, different assets, Off-balance sheet items and, to a lesser degree, money and due from accounts, and fixed assets and properties.

It helps us to determine the strength of financial institutions against loss of value in the assets. Decline in the value of assets, being the main reason of banking problems, straightforwardly spread in other different areas, as losses are later on written–off against capital, which as a result threatens the earning capacity of an organization. With this background, the asset quality is gauged in connection to the level and seriousness of non-performing assets, sufficiency of provisions for bad advances, recoveries of credits, asset distribution. Despite the fact that the banking system is infected with a huge volume of Non-Performing Loans (NPLs), the seriousness of this issue has balanced out to some certain extent.

The level of non-performing credits in bank's advance portfolio depicts the quality of bank advances which gives an evidence of the profitability, bank lending activities; it obliges the provision for write-offs are either portions or the majority of the credits. The write-offs are losses that the banks ingest with its equity capital, thus the banks hesitant to go for new risks and new advances which are depicted as the credit crunch (Alhassan, Brobbey and Asamoah, 2013). This is not to say that the issue of NPLs has taken an optional position. Sadly, it still remains the most dominant factor which affects the earning capability of banks. Popular indicators include non-performing loans to advance, advance default to total advances, and recoveries to credit default ratios.

Asset quality shows the level of financial strength and risk associated with the bank`s loan assets. It is one of the measurement tools which are normally used to find out the level of a bank's credit risk. Many researchers define the term asset quality helps to discover and evaluate the condition of bank's loan assets and how much weaker the assets are to risk exposure.

Maintaining sound asset quality includes cautious loan granting that must be performed and that which can increase the level of the bank's income base. On the other hand, unpredictable loan granting, takes the bank to poor asset quality which will reduce the income and profit, reserves and deposit dissipation, zero profit payout, disintegration of the capital base and negative shareholders' funds.

Managing non performing credits leads to high provisioning which influences profitability causing liquidity, impairment of shareholders' funds, weakening of capital and thus poor asset quality coming about into misery (Bebeji, 2013).

Supporting non Asset quality in this connection relates to the quality of the assets (advances) on a financial organization's balance sheet, taking into consideration the probability that a given credit will repay essential and interest on time. Reduced asset quality indicates that the institution must make provisions for consequent losses (Morgan, 2010).

Bank asset quality not just influences the financial and operating performance of the bank itself, additionally further imagines on the soundness of the national financial framework (Chaudhry and Singh, 2012). Yin (1999) alluded that the weakening of asset quality from the ignorance of advance quality by banks is one of the primary reasons behind the Asian Financial Crisis.

2.4.1 Non-Performing Loans to Gross Advances:

It is considered as the rate of nonperforming loans to gross advances. It shows the quality of portfolio credit of a bank. It assesses the asset quality which is fortified on the loan portfolio. It is very much useful for banks (Bank particular and macroeconomic reasons which influence the productivity of banks (Malik, 2013).

Non-performing assets by and large refers to those assets which stop to give any return to the bank. At the present time, NPAs is a major issue for the banks as it has ever been a main worry for the bank promoters and the government. However, capable banks have no reason to panic from the NPAs on the grounds that they can locate some different means of income to match these NPAs in the time of LPG (Uppal, 2009).

A total of obtaining cash upon which the indebted person has not made his or her planned installments for almost 90 days. A nonperforming advance/Loan is either in default or near to being in default. When a credit is nonperforming, the chances that it will be reimbursed in full are thought to be significantly lower. In case the debt holder begins making installments again on a nonperforming advance, it is converted into a re-performing credit, regardless of the fact that the indebted person has not got up to speed with all the missed installments.

Credit business is the principle business for all commercial banks. Since banks utilize a major segment of their funds for giving credit to firms and people, so they confront the possibility that organizations or people might sometimes indicate unwillingness to repay such borrowed funds instantly. This behavior often exposes banks to losses from giving credit business (Akpan and Riman, 2012).

The asset quality of the banking system has enhanced very much in recent few years. The percentage of Gross NPL to Gross advances for the commercial banks has decreased from 25 percent to fewer than 10 percent, while the provisions held by the banks against these NPLs covering around 70 percent of gross NPLs. Hence, the net NPL to the net advances proportion has demonstrated a remarkable decrease to 3 percent while is equivalent to international standards. The stream of NPLs has dropped to under 5 percent that implies that 95 percent of the credits in banks' portfolios are being completely serviced on time (Husain, 2005).

Bank nonperforming credits to aggregate gross advances are the benefit of nonperforming advances divided by the aggregate estimation of the credit portfolio (counting nonperforming credits before the finding of particular advance misfortune gaining). The advance sum recorded as nonperforming ought to be the gross estimation of the credit as recorded on the monetary record, not simply the sum that is still unpaid.

The provisions against non performing advances to gross advances proportion is a measure of the asset quality. Provision against non performing credits to gross advances has a strongly negative impact on return over assets for commercial banks in the Pakistan and, thus, the asset quality matters a lot for the sound financial performance (Nazir, Safdar and Akram, 2012).

To assess the asset quality, NPL/GA is favored over advance loss reserve to gross advances since the credit loss reserve is specifically reliant on a bank's profitability and banks with higher pre-provision income could make higher provisions and the other way around (Mirza and Alexandre, 2009).

Yet another internal determinant of income of banks is the quality of current assets (NPA) which is characterized as the proportion of net non-performing assets to net advances. Other things being equal, a bank which keeps an eye on an aggressive approach towards lending is expected to have a more elevated amount of NPA moreover. This is because of the weakening in due diligence that is resorted to by banks for inviting more clients. Hence, NPA is taken as another descriptive variable.

Alhassan, Coleman and Andoh (2014) investigated for the factors that deteriote asset quality. They took into account, 25 banks in Ghana during financial crisis, data from 2005 to 2010. They came to conclusion that non-performing loans area crucial determinant that deteriorates asset quality.

2.4.2 NPL to Shareholders Equity

Analysis of the nonperforming loans in the Albanian banking system:

The Albanian banking system continues to face serious difficulties in loan repayment. In fact it is evidence that the major part of problematic loans belongs to the corporate sector showing the real difficulties of the Albanian businesses in loans repayment. According to the national authorities the loans are classified in five categories in the Albanian banking system as shown below:

1. Standard loans, regular loans that do not present any difficulty in maturity and outstanding capital;
2. Follow up loans, these loans present the first signs of delays in repayment and are under supervision of banks, but still are not classified as problematic loans;
3. Substandard loans, are not classified as standard loans because of delays in repayment and are classified as problematic loans;
4. Doubtful loans are loans presenting significant delays in repayment, but the bank still hopes to collect them and are classified as problematic loans;
5. Lost loans are loans which cannot be collected from the banks and are classified as problematic loans (Shingjergji, 2013).

A number of researchers have examined the impact of Asset quality on the profitability in commercial banks in different countries. The results varied from one research to another as follows.

According to the Nisar, Susheng, Ahmed, Ke (2015) this research investigated how bank-specific, industry-specific and macroeconomic factors have affected the profitability of the banking sector of Pakistan. The empirical results obtained by applying Pooled Ordinary Least Squares (POLS) technique on panel data of all Pakistani scheduled banks over the period 2006 to 2013, show that profitability of Pakistani banking sector is negatively affected by Funding Cost (FC), Liquidity (LIQ), Non-performing Loans (NPL) and Administrative Expensive (ADETA), and Positively affected by Non-fund based services (NII), Capital Adequacy (CA) Banking Sector Development (LOAGDP) and Economic Growth (GDP).

This study embraced an explanatory approach by utilizing panel information investigation outline to satisfy the targets. Yearly financial statements of 38 Kenyan business banks from 2002 to 2008 were gotten from the CBK and Banking Survey 2009. A Multiple linear regression model is used to analyze the data. The examination demonstrated that all the bank particular components (Asset quality) had a statistically significant effect on performance (Olweny and Shipho, 2011).

The study established a descriptive design in its practice and the researcher decided to study business banks because of the accessibility of required information and easily accessible. All the 43 business banks in Kenya were focused on this study. Secondary information was taken from Central bank of Kenya Banks supervision reports. SPSS variant 20.0 was utilized for information examination. The t-test with a 5% level of significance was utilized as a part of the study and the connection coefficient (r), coefficient of determination and analysis of difference (ANOVA) was ascertained. The examination demonstrated that asset quality has a statistically significant effect on monetary execution (Anjili, 2014).

This study will explore and analysis the effect of total credit to aggregate resources and aggregate investment to aggregate resources as an intermediary for resources quality (autonomous variables) on the bank`s performance measured by EPS, ROA, ROE and Book value per share (Dependent variable). Applying multi and simple linear regression investigation, the most significant result was that bank`s asset quality indicators by and large have a positive effect on the performance (Kaddumi, 2015).

The study embraced the utilization of ratios as a measure of bank execution and asset quality since it is an evident means for evaluating the organizations' level of exercises while the information were analyzed utilizing the Pearson correlation and regression tool of the SPSS 17.0. The discoveries revealed that asset quality had a statistical relationship and impact on bank execution (Abata, 2014).

The commercial bank's profitability is measured as return on equity (ROE) and net-interest margin (NIM). Result specifies that the asset quality, measured by the loan loss provisions has positive affects the execution of the banks(Tariq, Usman, Mir and Ali, 2014).

Contrary to above researchers, the outcomes demonstrate that the effect of advances/resources proportion (LA) and credits under follow-up /advances proportion (LFA) as indicators of asset quality have a negative effect on benefit and significant at the 5% level of significance on organization profitability (Alpera and Anbar, 2011). Furthermore, the aim of this study is to investigate the impact of internal and external causes which affect the profitability. Internal causes include Size (LNTA), Capital (CAP), Liquidity (LQD), debt to equity ratio (DE), Non-performing loans to Gross advances (NPL), portfolio composition (PC), Loans to Total Assets (LA) whereas external causes include Gross Domestic Product (GDP), Inflation (INF), and Unemployment (UNMP). Return on Assets and Return on Equity are used as a measure of profitability. Data is collected for twelve (12) variables of twenty one (21) banks, including four (4) public and seventeen (17) private banks, for the year of 2006-2011, from the annual reports of banks, index Mundi and financial statement analysis of the State Bank of Pakistan (SBP). Nonperforming loan and portfolio composition has negative significant relationship with the profitability (Malik, 2013).

2.5 Management Efficiency

Efficient management is another most important factor behind the Performance of all banks. Management efficiency of the bank includes its administrative ability to react in diverse circumstances. The term management efficiency involves the capability of management in generating business and maximizing profits. A focal term 'administrative proficiency', which essentially indicates the capacity of a bank to increase benefits or minimize costs under given situations (Kauko, 2007). With increased competition in the Pakistani banking sector, the efficiency and effectiveness become the rule as banks constantly strive to improve the productivity of their employees. Presently the banks have extended their working hours. By the use of latest technology banks have improved their operating system. Management efficiency is a useful for the bank performance. Above all it is a qualitative factor which is applicable to institutions individually or can jointly use as an indicator of management efficiency. Expense ratio, earnings per employee, loan size and cost of unit per lent money is used as an alternate of the management efficiency. By the use of technology they are able to provide quick service in a short time, so now they are attracting customers and compete with each other on the basis of quickly and comfortably (Vijayakumar, 2012).

In the CAMEL model this parameter has an important position. It shows the management efficiency of the banks for better financial performance. The ratios which are used in this part are involved subject analysis to measure the efficiency and effectiveness of bank management. Bank management takes difficult decision depending on its risk perfection (Reddy and Prasad, 2011).Administration's effectiveness is calculated as Assets turnover. The higher the proportion the higher administration efficiency is. As administrators make progress toward more profit, it is likely that they would expand the expense of intimidation, which would upgrade profits (Naceura and Kandil, 2006).

The two main questions are "what drives performance", and "what contribute to performance" are headed in the minds of managers. Finding or highlighting the source of better performance and adoption of right management strategies is very important to the managers. The performance of the management based upon the availability of useful information for decision making, measuring the performance will give the idea that what is their current performance level and what can be done to enhance their performance. By using this information to check what the current performance isthus can focus on those areas in which they are weak or the resources should be allocated. The focus has shifted to analyze the

management performance over the last decade. While the management analyzes that how well the boards of directors are functioning, the diversity of its technical knowledge and its ability for making flexible and effective decisions.

Effective management is a required for the success of financial organization. It is difficult to make any comment related to the management efficiency on the basis of quantitative data because generally it is qualitative in nature (Sarker, 2006).The management efficiency is most important for the ensuring the bank stability and strength. Past studies are devoted to the evaluation of the performance of banks, due to the qualitative parameter it is not used to measure. More indicators should be used to evaluate the efficiency of management like operating expenses as percentage of assets, personal expense to average assets, and cost to income ratio (Avkiran and CAI, 2012).

Managing asset efficiency is very important because of its impact of the debt service ability of an organization. Better deployment of commercial resources can generate more profits. However the methods of administration proficiency are not same in past studies. There is a good spread among techniques which are used by different researchers in management efficiency. It is exciting to see that either the researchers have assumed or ignored the independence or interrelations while evaluating the execution of banks. Dave and Bhatt (2008) highlight the importance of the complex interrelation among the components, there was no good attempt was made to measure these types of interrelations. Monetary segment performance is reliant on management proficiency.

Olweny and Shipho (2011) suggest that the perceived notion that higher expenditure results with lower profits may not be straightforward as it seems, because higher amounts of expenses may be associated with higher volume of banking activities and therefore higher revenues. The Management has been empirically evaluated by non-interest expense to the sum of net interest income and non-interest income, personal expenses to average assets and cost to income ratio (Poghosyan and Cihak, 2011).

2.5.1 Admin expenses to Interest Income Ratio

The expenses that an organization incurs not directly tied to a specific function such as manufacturing/production or sales. These expenses are related to the organization as a whole as opposed to an individual department; also referred to as "administrative cost."(Investopedia)

“Overhead expenses also include selling & administrative expenses are those expenses that are incurred whether the firm produces any revenues or not” (Piotrowski, 2001).The common concept is that a high Cost Income Ratio is equal to low productivity and low efficiency (Burger & Moormann, 2008).Karim (2001) states that larger banks tend to be more cost efficient.

Administrative expenses as percentage of total assets have a negative impact on bank performance. The negative sign shows that the lack of ability in expense management in banks. If administrative costs are managed properly, if expenses, increase it will increase the interest margin of the banks and raise income. The coefficient sign which is negative shows that banks are incapable to pass its expenses to customers because of the competition (Davydenko, 2010).

Related to the cost to operate a business and are not directly attributable to the production of goods or services. The Administrative expenses are linked to the business as a whole. It is not assigned to the individual section as a complete. These expenditures are essential costs which are associated with the administrative, clerical, and over-all functions of the corporate. Rent of the building, utilities or salaries of the employees are the type of administrative expenses and these are not involved in production of goods. These expenses incurred in controlling and directing as a business, but cannot be easily identified with the financing, marketing or production operations. The salaries of top level management (executive cost of services) an example of managerial expenditure. Admin overheads usually include the costs, which offer a wide benefit to the business. Cost of utilities is the most common example of administrative expenses.

2.5.2 Gross Advances to Total Deposit Ratio

Gross advance amount means the sum payable to the payee or for the payee's account as consideration for a transfer of structured settlement payment rights before any reductions for transfer expenses or other deductions to be made from such consideration. The aggregate estimation of private home loan credits progressed by social orders in the period, including advances for house buyers, further advances, remortgages and so on.

A commonly used statistic for assessing a bank's liquidity by dividing the banks total loans by its total deposits. This number, also known as the LTD ratio, is expressed as a percentage. If the ratio is too high, it means that banks might not have enough liquidity to cover any un-foreseen fund requirements; if the ratio is too low, banks may not be earning as much as they could be (Investopedia).

Operation ineffectiveness is also positive and significantly related to loan-to-deposit spreads banks with higher costs apparently tend to operate with higher margins (Altunbas et al., 2001).

The coefficient to the loan-to-deposit ratio (L/D) carries a positive sign and is statistically significant in all of the specific expense items equations and it is significant at the one percent level in the overall expense equation (Rhoades, 1980).

Find an inverse relationship between productivity growth and growth of loan to deposit ratio. This could be due to the fact that banks with rapid expansion in loan activities follow less stringent lending criteria and thus are exposed to higher credit risk resulting in higher loan losses (Kumbhakar, Vivas, Lovell and Hasan, 2001).

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 on bank size, interest income to earning assets and loans to deposit ratio on estimated efficiency scores.

A number of researchers have examined the impact of Management Efficiency on the profitability in commercial banks in different countries. The results varied from one research to another as follows.

Evaluation of management efficiency is important for banks, because it has a direct impact on the overall performance of an institution. On the basis of past performance directors evaluate management and also with the deliberated direction which is provided by the management. The check that is the incentive of management is according to the objective of institution safety and reliability. The arguments go to measure the management's quality requires the deep evaluation of the management system. To measure the management performance on single quantitative technique is not sufficient. Effective administration is one of the utmost significant factors which define the profitability of banks and looks one of the difficult issues to find with the financial ratios

The research is carried out in Kenya the results found that Management efficiency has a significant impact on the performance of commercial banks (Ongore, 2013).During the period of 2005 to 2009 the researchers evaluatedthe performance of Islamic and Conventional banks by applying the CAMEL model. They found that Islamic banks performed better and as they have high liquidity as compared to the conventional banks. After the study it is realized that conventional banks are pioneer in management and have a good earning ability (Jaffar and Manarvi, 2011).There is a very strong relationship between bank performance and the management efficiency through the expenses of management (Sufian and Chong, 2008).Management efficiency has a positive influence on the bank profitability; however the impact of only management efficiency is statically significant (Aftab, Samad and Husain, 2015).

The study utilized correlation and linear regression analysis. Return on Assets (ROA) and Earnings Yield (EY) are utilized as intermediaries of inward and outer profitability respectively. The outcomes of the regression investigation recommend that bank size, liquidity and administration effectiveness have a statistically significant effect on bank performance as Return on Assets (Lipunga, 2014).

2.6 Earnings and Profitability

Earning Quality demonstrates the capability of a bank to earn regularly. It also defines the sustainability and progress in earnings in the future (Khatik and Nag, 2014).The quality of earnings is a very significant factor which shows the aptitude of a bank to earn consistently. It fundamentally defines the profitability of the banks (Chisti, 2012).

The most generally acknowledged measure of the execution of commercial banks is current productivity (Earnings). There are different indicators and measures of profitability. The most important indicators are Return on Assets (ROA) and Return on Equity (ROE). Essentially, the ROA measures net income divided by aggregate resources. The ROE is the proportion of aggregate net income to the banks' value capital (Afolabi and Adawale, 2013).Benefits add to while misfortunes bring about the disintegration of the capital base of a banking organization. Earnings and profitability are normally measured as far as returns received on resources or capital employed (Khalid, 2006).

The amount of profit produced by the company during a specific period of time, usually presented on a quarterly or, annual base. Profit ordinarily indicates to after-tax income. Eventually, business income is the primary determinant of its share price, on the grounds that profit and the circumstances, identifying them can demonstrate whether the business will be productive and effective over the long haul. Solid profit and benefit profile of banks reflects the capacity to help present and future operations. All the more particularly, this decides the ability to absorb misfortunes, finance its extension, pay profits in the form of dividends to its shareholders, and develop a sufficient level of capital. Administration's Efficiency is ascertained as the proportion of Interest Income over Interest Cost, this degree will indicate how well a money related organization has the capacity to utilize its assets and liabilities internally. Also, as the objective is to earn more from the investment that have been made, the higher this degree for an organization the more effective it is in creating more benefit over its operating expenses (Guisse, 2012).

The organizations are required to increase high earnings and profitability in order to avoid capital base losses. Although diverse indicators are utilized to fill the need, the best and most generally utilize indicator is a Return on Assets (ROA). Profitability is a quantitative measure of the administration's capacity to use stakes effectively to make esteem for shareholders and keep up and enhance capital soundness. In the same setting, in the investigation of profitability, it will be critical to focus the degree of enhancement (sorts and sources) of earnings streams. It is reasoned that productive banks have a tendency to acquire high bank appraisals, and bankrupt banks appear to have issues creating satisfactory benefits(Abdallah, 2013).

Financial performance will look at the statement of an accounting summary that specifies a business organization's revenues, expenses and net income. Profitability is the most important for stockholders of a bank because it reflects what the bank is earning on their investments (Obamuyi, 2013). Earnings and profitability ratios are used to measure the ability of the bank to earn a profit compared to their expenses. It shows the bank's overall efficiency and performance as it examines the bank's investment decisions as compared to their debt situations(Nazir, 2010).

Profitability is the profit earning capacity, which is a crucial element contributing to the survival of the organizations. The perpetual existence of the organizations relies on upon the profit earning capacity of the firm, which is likewise

thought to be the primary figure affecting the reputation of the firm. The borrowing limit of the firm is likewise measured by Profit. Subsequently, it is considered as the principle, consider deciding the capital structure of the firm. Profit comprises of two words, the profit and ability. Along these lines, it is important to separate in the middle of profit and profitability at this crossroads. Profit, from the bookkeeping perspective, is arrived at by deducting from the aggregate income of an undertaking all sums consumed in procuring that wage, though productivity can be measured as far as profit demonstrated as a percentage of sales known as profit margin. Profitability pretty much relies on the good use of assets and human resource. It is beneficial to build creation limit and utilization propelled innovation to chop down the expense of generating and compensation cost with a specific end goal to expand profitability against the venture, as well as for investor's return perspective (Venkatesan and Nagarajan, 2012).

The profitability and earnings are measured on the basis of most common ratios such as Return on Assets (ROA), Return on Equity (ROE) and Interest Income to Total Assets Ratio.

2.6.1 Return on Equity

This proportion shows the management productivity in utilizing the bank funds in attaining a profit (Alshatti, 2014). A definitive reason for any benefit looking for the association is to make riches for its proprietors. It is the objective of a street vendor, and in addition to a vast listed organization. The main contrast is that the street vendor works for the advantage of one individual, though a listed organization works for the advantage of an extensive number of shareholders. Shareholder value is made when the equity returns of an organization surpass the expense of that value. It can likewise be depicted as the present estimation of all future money streams, less the expense of obligation (Wet and Toit, 2006).

Performance measurement systems were produced as a method for observing and maintaining organizational control, which is the methodology of guaranteeing that an association goes for systems that prompt the accomplishment of its general objectives and destinations. It is further clarified by Ongore and Kusa (2011) that ROE is the proportion of Net Income after Taxes divided by Total Equity Capital. It shows the rate of profit earned for the invested put resources in the bank by its stockholders. Performance measures, the key tools for performance measurement systems, assume a crucial part in every association as they are frequently seen as forward looking pointers that aid administration to foresee an organization's financial execution and commonly uncover the requirement for conceivable changes in operations (Maditinos, Sevic and Theriou, 2006).

However, the decision of performance measures is a standout amongst the most critical challenges facing organizations. Ineffectively picked performance measures routinely make the wrong flags for administrators, prompting poor choices and undesirable results. There are tremendous hidden expenses in using the wrong performance measures. Shareholders pay the charge every day as over investment and acquisitions that don't pay off and so forth. It is not that the administration is poor. Just, it is the wrongly picked execution measures, which thus push the administration to take improper choices Performance measures may be described as financial and non-financial. ROE ratio is the most usually used to evaluate the execution of banks and this proportion is critical in financial specialist's perspective (Teker, Dilek and Kent, 2011).

ROE tells what rate of profit the organization makes for each financial unit of equity put resources into the organization. ROE doesn't indicate the amount of money will be coming back to the shareholders, since that relies on upon the organization's choice about dividend payments and on how much the stock cost increases in value. Nonetheless, it's a decent evidence of whether the organization is even capable of generating a return that is worth regardless of whatever danger the investment may involve. ROE is generally computed by dividing net profit by average shareholders' equity (Berzkaln and Zelgalv, 2014). This ratio usually indicates the investor rate of return on their investment in the corporation.

2.6.2 Interest Income to Total Assets Ratio

Interest Earning is a simple way of income for banks. Interest Income comprises of Interest on Deposits with RBI, Interest on Advances, Income from Investments, Discount on Bills and Other Inter-Bank Funds (Chisti, 2012).According to the Farooq (2007) In Islamic bank's income included in the markup income is considered as return on investment and invests in diverse modes of financing. On the other hand, conventional banks usually earn income from the interest.

The term that organizations use on their income statement for reporting the interest earned on cash for the moment held in savings accounts or other investments. Since the interest wasn't a part of the original investment, they record it independently, as interest income. The amount of every gross investment, cash and equivalents, receivables, and different resources as they are exhibited in the accounting report.

In money related bookkeeping, asset is an economic asset. Anything tangible or intangible that is equipped for being possessed or controlled to deliver quality and that is held to have positive monetary worth is viewed as an asset. Just expressed, the resource's state value of possession that can be changed over into money (in spite of the fact that money itself is likewise viewed as an asset).

The statements of financial position of a firm record the monetary value of the assets which are held by the firm. It is cash and different resources having a place with an individual or business. Two noteworthy resource classes are tangible assets and intangible assets. Tangible resources contain different subclasses, including current resources and fixed resources. Current resources include cash, short-term investments, cash equivalents, stock inventory, accounts receivable. Fixed resources include such things as structures and equipment.

2.6.3 Return on Assets

This ratio measures the ability of the company that how well management utilizes the organization's assets and also measure the effectiveness of the establishment in generating profits (Hossan and Habib, 2010). A financial proportion, the part of Return on Asset (ROA) is to show the rate of benefit which any organization/ association picks up against its whole capital investment. It is fairly known as net income (or pretax profit)/ total resources. ROA is a Profitability Ratio. ROA signifies bank's administration proficiency to produce revenue through utilizing the bank resource base and this is a key measure commonly used in the literature for assessing bank execution (Elsiefy, 2013).ROA is utilized by organizations and banks to outfit them with an important instrument for assessing their progress, including utilization of assets and financial quality (Haque, 2014). Return on Assets (ROA) measures how profitable an organization is with respect to its aggregate assets. Thus, it measures how effectively an organization uses its assets. Return on assets (ROA) is an extensive measure of overall bank execution from an accounting viewpoint (Jha and Hui, 2012).

The assets of the organization consist of both obligation and equity. Both of these sorts of financing are utilized to run the operations of the organization. The ROA figure gives investors that how adequately the organization is changing over the cash it needs to put into net income. The higher the ROA ratio depicts that the organization is acquiring more cash for less investment and utilizing their assets productively. If one organization has a net income of $1 million and aggregate possessions of $5 million, its ROA is 20%; nonetheless, if an alternate organization procures the same sum, however has downright stakes of $10 million, it has an ROA of 10%. Taking into account this sample, the first organization is better at changing over its investment into a benefit. If this example truly considers it, administration's most paramount occupation is to settle on insightful decisions in apportioning its assets. Review that the return On Assets (ROA) is a sign of the operational productivity of the bank (Petersen and Schoeman, 2008).

Anyone can make a benefit by throwing huge amounts of cash at an issue; however, not very many managers exceed expectations by making vast benefits with little investment. In banking perspective, this ratio indicates management ability to attract deposits at a reasonable cost and their investment to earn more profits. This ratio defines that how well the bank's assets are managed in order to maximize returns (Ahmeti, Hoti and Bekteshi, 2014).Financial measures of the bank performance are an important part of running a growing business, especially in the current economic environment. ROA is the indicator of measuring managerial efficiency. In ROA, the bank will know the efficiency and capability to convert its assets into net income. ROA is the ratio of net income to average total assets (Socol & Danuletiu, 2013).

A number of researchers have examined the impact of on the Earnings &profitability in commercial banks in different countries. The results varied from one research to another as follows.

The reason for this study is to clarify the components which may have effects on the intellectual capital execution in UAE Banks over the period 2006-2009. The Multiple regression examination is utilized to test the relationship between intellectual capital execution as a dependent variable and certain independent variables. The outcomes demonstrate that earnings quality has a significant effect on intellectual capital execution in banks (El-Bannany, 2011).The outcomes demonstrate that productivity proportion (ROE), Market proportion (PBV), income from operations, and leverage proportion (DER) has a significant effect on earnings per share (Taani and Banykhaled, 2011).

According to the Heikal, Khaddafi and Ummah (2014) research is carried out to find the impact of independents variable on a dependent variable. Return on Assets and Return on Equity are used as independent variables and income growth is taken as the dependent variable on automotive companies that were listed on Indonesia stock exchange. The results show that Return on Assets and Return on Equity have a statistically significant impact on an income growth. Furthermorethe study carried out by Olweny and Shipho (2011) the outcome shows that there is a negative, but significant association between operational cost effectiveness and firm performance.

2.7 Liquidity ratios

Liquidity ratios are used to assess the overall administration of banks (Han, Kim and Kim, 2012). Liquidity is a measure of the capacity and straightforwardness with which resources can be changed over to money. Fluid resources are those that can be changed over to money rapidly if necessary to meet budgetary commitments (Farooq, Maqbool, Humanyun, Nawaz and Abbas, 2015). Liquidity ratios measure a company's ability to pay off its short-term obligations. Liquidity ratios are a result of dividing cash and other liquid assets to the short term borrowings and current liabilities. The most common examples of liquidity ratios include the current ratio, quick ratio and working capital ratio.

Current ratio Current ratio is a measure of company liquidity. Current ratio shows a company's ability to meet short-term debt obligations. The current ratio measures that a firm has enough assets to pay its liabilities for a year.

Quick Ratio Quick ratio is a measure of a company's ability to meet its short-term obligations. Quick assets include those current assets that can be easily converted to cash without significant decrease in their book value. Quick ratio is considered as a measure of a company's financial strength or weakness.

Working Capital Working capital is the amount of current assets that are in excess of current liabilities. Working capital is often used to measure a firm's ability to meet current obligations. It measures how much liquid assets a company possesses to expand its business**.**

As it is clear at this point, liquidity is a standout amongst the most vital objectives of working capital administration and focal assignment of cash administration. Many authors have communicated their meaning of liquidity as a whole "a

firm is fluid when it can pay bills on time without excessive expense" (Maness and Zietlow, 2004). Liquidity can likewise mean the degree to how rapidly resources can be changed over into cash (Howells and Bain, 2005). Solvency and liquidity are two ideas that are nearly related and reflect upon the activities of organization's working capital arrangement. As Maness and Zietlow (2004) have characterized; "a firm is viewed as solvent when its benefits surpass its liabilities".

The term Liquidity demonstrates the capacity of a bank to meet its monetary obligations. Keeping up the right level of liquidity is vital for guaranteed development and profit. Banks should be more careful in investments in order to generate more profit on investment as well as to provide liquidity to the depositors. The High Liquidity proportion demonstrates the bank's proficiency (Khatik and Nag, 2014).

A high level of liquidity must be maintained by any financial institution or bank in order to overcome the difficulties it may face in short term business activities, to minimize the chances of financial distress and exploit investment opportunities cash supply lines must be open. Ability to pay the day to day expenses indicates bank's liquidity position and also gratifies depositors demand for with drawls. To attain liquidity, the financial institution must focus on these three components: the highly liquid assets that can be easily converted into cash, access to the inter-bank market, their anticipated future cash inflow and outflow. Current status of liquidity is taken into account in relation to the liabilities of evaluating banks of liquidity. It also considers the ability of the bank to deal with the chances of unpredicted changes in its financial resources and the liquidation of its assets that will be affected by prevailing market conditions and minimum possible decrease in its earnings (Babar and Zeb, 2011).

According to the Tesfaye (2012), the conventional bank resources which are fluid incorporate money, reserves expressive an additional of stores required by law (i.e., trusts held in the record at the state bank), securities (e.g., regime obligation, commercial paper), what's more, interbank credits for a short period of time (one to three days).Moussa (2015) clarified that the practicality of business banks relies on upon the liquidity position of the bank. As indicated by Kurawa and Abubakar (2014) liquidity essentially implies the capacity to change over an asset for cash with the least delay and least misfortune/cost. Banks to a great extent work with the funds obtained from investors in the manifestation of demand and time deposit; thusly liquidity resources assume an essential part. These liquidity resources are the key balance sheet things which have the ability to keep up the confidence of investors which is the most significant intangible resource of the commercial banking business

Liquidity administration is an idea that is accepting genuine consideration everywhere throughout the world, particularly with the current money related circumstances and the condition of the world economy. A percentage of the striking corporate objectives incorporate the need to boost benefit, keep a high level of liquidity so as to ensure wellbeing, accomplish the largest amount of proprietor's net worth coupled with the fulfillment of other corporate targets. The significance of the liquidity administrator as it influences corporate benefit in today's business can't be over emphasized. The crucial part in overseeing working capital is obliged maintenance of its liquidity in regular operation to guarantee its smooth running and meets its commitment (Eljelly, 2004). Liquidity assumes a critical part in the effective working of a business firm. The organization should guarantee that it does not suffer from lack-of or additional liquidity to fulfill its short-term obligations. A research of liquidity is important significance to both the inward and the outside examiners due to its nearby association with normal operations of a business (Bhunia, 2012). Dilemma in liquidity administration is to attain to required trade-off in the middle of liquidity and productivity.

The liquidity administration is an essential consider business operations. For the extreme survival of business, the firm ought to have an imperative level of liquidity. It ought to be neither extreme nor insufficient. Excessive liquidity implies an aggregation of perfect funds. Which may prompt lower productivity; expand speculation, and unjustified growth. While deficient liquidity brings about disturbances of business operations. A legitimate harmony between these two amazing circumstances accordingly ought to be kept up for effective operation of the business through aptitude full liquidity administration (Alshatti, 2014).Disappointment of the bank to meet its commitment because of lacking liquidity will prompt poor credit value, defeat of investor's confidence or, on occasion lawful fall flat bringing about the conclusion of the bank. On the other hand, a high rate of liquidity is inappropriate, since inefficient resources produce nothing. The main part of the bank capital would be unnecessary tied up in current resources. It is consequently essential to come to convert stability between absence of liquidity and high liquidity (Donkor and Kodua, 2013).

Liquidity administration is one of the vital elements of bank's administration. It is important to avoid the liquidity shortfall, which can prompt the bankruptcy issue. Fluid resources, which can be easily changed over to money, are frequently connected to the lower rate of return. Henceforth, high liquidity would influence profitability adversely (Al-Smadi and Al-Wabel, 2011).

2.7.1 Cash Ratio

The Liquidity of the organization can be tested through different ratios that include current ratio, quick ratio, working capital ratio and cash ratio as discussed earlier. well known indicator of liquidity is Cash ratio, it is defined as the ratio of cash and cash equivalents to net assets (Bokpin, 2012). Moreover, cash ratio can be defined as, cash and marketable securities divided by the mean value of opening and closing total assets (Yu and Jiang, 2010). Furthermore, Chiang and Wang (2011) defined cash ratio as cash divided by assets. The Cash proportion decides the extent to which an organization can quickly change their liquid resources into cash to meet the short term liabilities (Donkor and Kodua, 2013).

According to the Amuzu (2010) cash ratio is the most important indicator of liquidity used to measure for the amount of money available to adjust the current obligation (money/Total Current Liabilities). Cash ratio refers to the proportion of an organization's aggregate money and money equivalents to pay off its current liabilities. The money proportion is most regularly utilized as a measure of organization's liquidity. It can thusly figure out whether, and how rapidly, the organization can return its short term obligation. A solid money proportion is helpful to banks when choosing the amount of obligation, if any; they would be ready to reach out to the asking party.It is the most well-known ratio used to measure the liquidity position of any business (Hossan and Habib, 2010).

Cash proportion is the ratio of an organization's money and money equivalent resources for its aggregate liabilities. Money proportion is a refinement of quick proportion and demonstrates the degree to which promptly accessible funds can pay off current liabilities. Money proportion is the most stringent and progressive of the three liquidity proportions (current, quick and money proportion). It just takes a look at the organization's most fluid short-lived resources – money and money reciprocals – which can be most effectively used to pay off current commitments (Masum and Johora, 2012).

A number of researchers have examined the impact of liquidity on the profitability in commercial banks in different countries. The results varied from one research to another as follows.

According to Anoh (2012) there is positive relationship between liquidity administration and the performance of banks. Agbada and Osuji (2013) while leading a study on the efficacy of liquidity administration and banking execution, which is clear about the way that, there is a significant relationship between productive liquidity administration and banking execution and that effective liquidity improve the soundness of banks. Akanbi and Ajagbe (2012) investigated the relationship between cash ratio and profitability of banks. They used financial data of three Nigerian commercial banks from 1992 to 1999 and applied regression model. Researchers found that cash ratio and profitability are positively associated. Lartey, Antwi and Boadi (2013) tried to figure out the relationship between the liquidity and the profitability of banks verified on the Ghana Stock Exchange. It was observed that for the period 2005-2010, both the liquidity and the gains of the listed banks were declining. Once more, it was additionally discovered that there was a very weak positive relationship between the liquidity and the gains of the listed banks in Ghana.

These discoveries support Bourke (1989) who discovered some proof of a positive relationship between fluid resources and bank benefit for 90 banks in Europe, Australia North America and from 1972 to 1981. In the perspective of the way that liquidity has some measure of direction on the productivity of a bank, it is imperative that banks deal with their liquidity exceptionally well. At the point when banks hold satisfactory fluid resources, their benefit would progress. Satisfactory liquidity helps the bank minimize liquidity danger and budgetary emergencies. The bank can assimilate any conceivable unforeseen stun brought on by the surprising requirement for a reduction in liabilities or the increment in resources side of the Statement of Financial Position. Then again, if fluid resources are held unreasonably, productivity could reduce. Fluid resources for the most part have no or minimal enthusiasm producing limit. The opportunity expense of holding low-return resources would in the long run exceed the advantage of any increment of the bank's liquidity flexibility as seen in financing market.

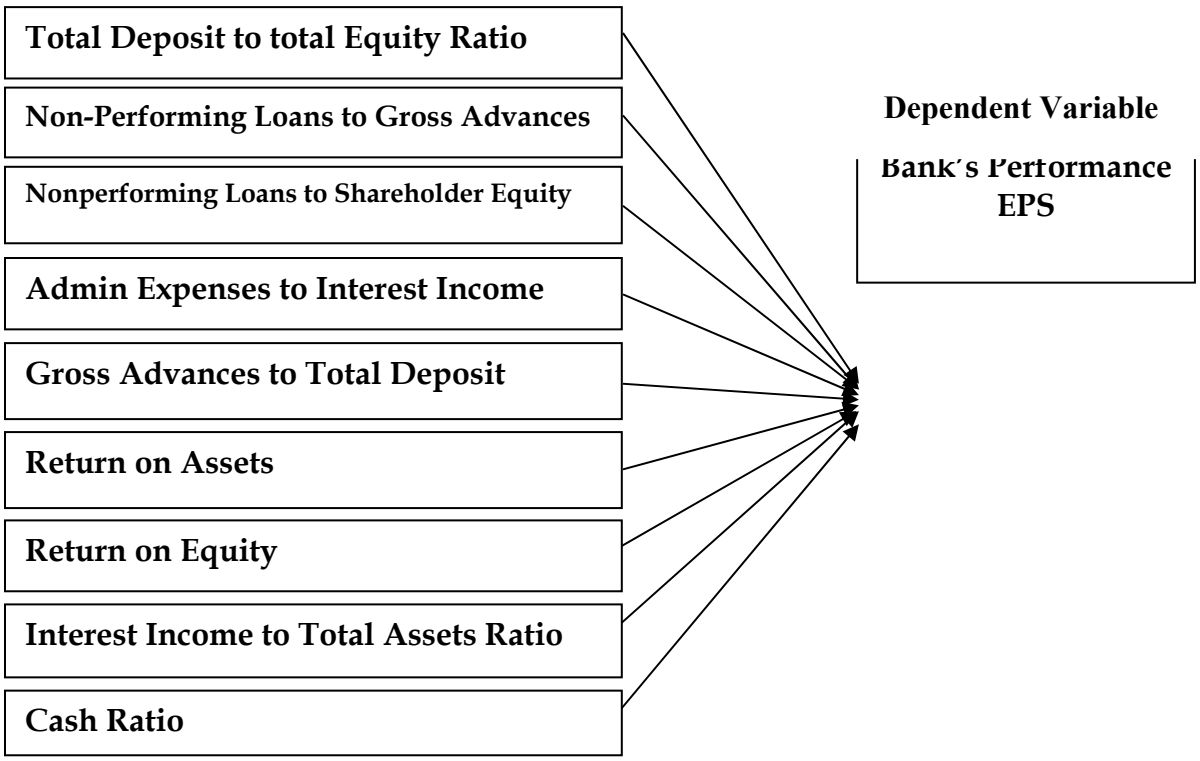
Olagunju, David and Samuel (2011) analyzed liquidity administration and business banks' profitability in Nigeria. Discoveries of this study show that there is a significant relationship in the middle of liquidity and benefit. That implies benefit of business banks is fundamentally affected by liquidity and the other way around.

The relationship between liquidity and the benefit of oil and gas organizations recorded at Karachi Stock Exchange (KSE) Pakistan is presented by Saleem and Rehman (2011) general population for 26 oil and gas organizations traded every year were considered in the study. Linear regression through SPSS was conducted. Report investigation was the principle research technique used to gather secondary information for the study. The money related reports of the 26 oil and gas organizations were considered and important liquidity and productivity proportions were computed. It was discovered that for the time of 2004 – 2009, there was a significant impact of liquidity ratio on the profitability of the organization. Zygmunt (2013) perceives the liquidity effect on productivity utilizing populace study, including all shine listed organizations for 9years (2003 – 2011) utilizing Pearson's relationship coefficient and OLS regression model. They find that, the empirical research over the liquidity effect on productivity, demonstrate the presence of statistically significant relationship in the middle of liquidity and benefit. The study inferred that the observational studies give the basis to finish up about the presence of liquidity effect on profitability.

2.8 Major Conclusions

The literature review on the determinants of the CAMEL model to assess the performance of banks has shown mixed results with respect to the significance and direction of their association. Some of the studies have shown significant and positive results of these variables with the firm's performance, whereas significant and negative results have also been found. The studies in the literature review showed that all components of CAMEL model have a significant effect on the bank's performance. In case of capital adequacy, asset quality and earnings & profitability, most of the studies showed these variables were positive and negative, but significantly related to the bank's performance, whereas studies on management efficiency and liquidity showed a positive and significant relationship with the bank's performance.

2.8 Theoretical Framework
Independent Variables



2.8.1 The Theoretical framework is a diagram that indicates the variables and theoretical constructs of interest. The diagram is read from left to one side. The dependent variables are located on the right side and the independent variables are located on the left side. The arrow shows the relationship between independent and dependent variables. The arrow starts from the independent variable and finishes at the dependent variables. It demonstrates that the variance in the dependent variable is sequels to the changes in the independent variable. In the above given model, Capital Adequacy, Asset Quality, Management efficiency, Earnings & profitability and Liquidity are independent variables while, the Earnings per share as firm performance is a dependent variable. The model demonstrates the effect of five independent variables on one dependent variable. The research model has been derived from the following studies: Momeni and Hakimeh Gharibi, (2012); Kouser and Saba (2012); Reddy (2012); Ifeacho and Ngalawa (2014); Jha and Hui (2012); Thirunavukkarasu and Parthiban (2015);Matthew and Esther (2012); and Nagamani and Williams (2015).

2.10 Hypotheses

On the basis of the above literature review, the study has following hypotheses:

H1: There is a significant negative impact of Total Deposit to Total Equity ratio on the Bank's performance.
H1o: There is a significant positive impact of Total Deposit to Total Equity ratio on the Bank's performance.
H2: There is a significant negative impact of Non-performing Loans to Gross Advances ratio on the Bank's performance.
H2o: There is a significant positive impact of Non-performing Loans to Gross Advances ratio on the Bank's performance.
H3: There is a significant negative impact of Non-performing Loans to Shareholder Equity ratio on the Bank's performance.
H3o: There is a significant positive impact of Non-performing Loans to shareholder Equity ratio on the Bank's performance.
H4: There is a significant negative impact of Admin expense to interest income ratio on the Bank's performance.
H4o: There is a significant positive impact of Admin expense to interest income ratio on the Bank's performance.
H5: There is a significant negative impact of Gross advances to total deposits ratio on the Bank's performance.
H5o: There is a significant positive impact of Gross advances to total deposits ratio on the Bank's performance.
H6: There is a significant positive impact of Return on Assets on the Bank's performance.
H6o: There is a significant negative impact of Return on Asset son the Bank's performance.
H7: There is a significant positive impact of Return on Equity on the Bank's performance.
H7o: There is a significant negative impact of Return on Equity on the Bank's performance.

H8: There is a significant negative impact of Interest Income to Total Assets Ratio on the Bank's performance.
H8o: There is a significant positive impact of Interest Income to Total Assets Ratio on the Bank's performance.
H9: There is a significant positive impact of Cash Ratio on the Bank's performance.
H9o: There is a significant negative impact of Cash Ratio on the Bank's performance.

3 RESEARCH METHODOLOGY

This section gives the information about the methodology that is used to carry out the research: The main discussion is on the population, sample frame and size, sampling method, research design, research instruments and on the use of techniques that will be used to measure and interpret the variables of the study in the subsequent chapter of the research.

3.1 Sampling Method

In this research non-probability sampling method is used.

3.1.1 Population

Banking sector of Pakistan is taken as population for this research; including listed and unlisted Banks that constitute the whole Banking industry of Pakistan.

3.1.2 Sample Size

The sample frame consisted of the Commercial banks in Pakistan. The sample size of the research is ten commercial banks operating in Pakistan.

Table 4.1: Selected commercial banks

N0	Name Of Banks	Remarks
1	Allied Bank Limited	
4	Askari Bank Limited	
3	Bank Al-Falah	
2	Bank Al-Habib	
5	Faysal Bank Limited	
6	Habib bank Limited	
7	KASAB Bank Limited	
8	Muslim Commercial Bank Limited	
9	National Investment Bank Limited	
10	United Bank Limited	

3.1.3 Sampling Technique

The main aim of sampling is to select a representative group of element that truly reflects the characteristics of the population. In this research convenient sampling technique was used, due to the reason that the research focuses on secondary data. The necessary data is available from the official website of the ten commercial banks, which meet the requirement of the study.

3.2 Data Collection Method

The proposed topic relates to Banking Sector of Pakistan. For this purpose, secondary data were used to assess the performance of the banks. The vital information is gathered from the financial statements of ten Pakistani banks over the period of 2007-2013. This data is used to calculate the key financial ratios of the selected Pakistani banks for the above mentioned period, as well as to assess the execution of these banks. Moreover, data were also assembled from articles, papers, the World Wide Web (Internet), Specialized International Journals, and relevant previous studies.

3.2.1 Research Instruments

For this research secondary data is used for data collection of selected Commercial Banks in Pakistan. This research focuses ten commercial banks of Pakistan with respect to application of Camel Model. CAMEL model include Capital adequacy, Asset quality, Management efficiency, Earnings and Liquidity.

The Variables

Referring to the prior studies, this thesis will employ two categories of variables in order to examine the profitability of the selected commercial banks. These categories are classified as dependent variables and independent variables. In the case of this study, ten (10) variables have been chosen: one dependent and nine independent.

Table 4.2: The variables measures and their notation

Bank-Specific	Variables	Measures	Notation
Dependent Variable	Performance	Earnings per share= $\frac{\text{Net Income}}{\text{Outstanding Shares}}$	EPS
Independent Variables	Capital Adequacy Ratio	$Total\ Deposit\ to\ Equity\ Ratio = \frac{\text{Total Deposits}}{\text{Total Equity}}$	CAR
	Asset Quality	$\text{Non} - \text{performing loans to gross advances} = \frac{\text{NPL}}{\text{Advances}}$	AQ
	Management Efficiency	$Non - performing\ Loans\ to\ shareholder\ equity = \frac{\text{NPL}}{\text{Equity}}$ Admin expense to interest income = $\frac{\text{Admin expense}}{\text{Interest income}}$ Gross advances to total deposits = $\frac{Gross\ Advances}{\text{Total deposits}}$	ME
	Earnings Quality	Return on Assets = $\frac{\text{Net Income}}{\text{Total Assets}}$ Return on equity = $\frac{\text{Net Income}}{\text{Total Equity}}$ Interest Income to Total Assets Ratio $= \frac{Interest\ Income}{\text{Total Assets}}$	EQ
	Liquidity	Cash Ratio = $\frac{\text{Cash and cash equivalents}}{\text{Current liabilities}}$	LQ

Capital Adequacy:

It is vital for a bank to maintain investors' confidence and preventing the bank from bankrupt. It shows the overall financial condition of banks and also the ability of administration to overcome the need of additional capital (Prasad and Ravinder, 2012). Capital adequacy is measured by the degree of money to hazard weighted holdings. A solid capital adequacy proportion reinforces the confidence of investors in the bank. It is a measure of a bank's ability to meet its obligations relative to its exposure to risk. The capital adequacy proportion exists to guarantee that a bank has the capacity handle misfortunes and satisfy its commitments to account holders without stopping operations. Capital adequacy is a critical parameter for judging the quality and soundness of keeping money framework banks with a sensible Capital adequacy ratio can absorb the sudden misfortunes easily and their expense of funding is additionally lessened which at least enhance the benefit of banks (Fatima, 2014).

The capital base of the banking sector facilitates depositors in forming their risk perception of the firm. Also, it is the responsibility of financial managers to retain adequate levels of capitalization. Moreover, if the banks absorbing unanticipated shocks, it indicates that the institution will continue to honor its obligations. The capital adequacy ratio is most widely used to assess the performance of the banks. According to the state bank of Pakistan, a minimum 10 percent CAR is required. Capital Adequacy can be the percentage ratio of a monetary organization's primary capital to its resources (advances and investments), utilized as a measure of its monetary strength and stability (Ogege, Williams and Emerah, 2012).

Capital adequacy finally determines that how well financial institutions can fight with shocks to their balance sheets. Thus, it is beneficial to track capital-adequacy ratios that take into account the most important financial risks that are interest rate risks, credit, and foreign exchange by allocating risk weightings to the organization's assets.Capital requirement is also known as capital adequacy. It is the amount of capital that a bank and other financial institutions have to hold as compulsory by the state bank of Pakistan. This is ordinarily communicated a capital adequacy degree that must be held at a rate of danger weighted resources. These prerequisites are instituted to guarantee that these establishments don't tackle overabundance influence and get to be insolvent. This ratio is mostly used to protect investors, promote the stability and efficiency of financial systems round the world (Aspal and Nazneen, 2014).

Asset Quality:

Resources quality investigation serves to see how asset quality could affect a banks future profitability and capital adequacy. Hence, the asset quality examination is viewed as an integral part of a bank quantitative execution evaluation (Elsiefy, 2013). It considers the rate of bank credits which are an NPA (non-performing assets), high NPA suggests that advances given banks are of lower quality and in this manner not a decent thing for the bank. The Gross NPAs is measured as a percentage of net advances. The lower the ratio, the better the quality of advances (Vijayakumar, 2012).

The asset quality is an important indicator to measure the strength of a bank. The reason behind computing the asset quality is to determine the factor of non-performing assets (NPA) as a percentage of the bank total assets (Kumar and Sharma, 2014). Asset quality determines the robustness of financial institutions against loss of value in the assets. The declining in value of assets, being a major source of banking complications, directly transfer into other areas, as losses are ultimately written-off against capital, which finally reduces the earning capacity of the institution. With this the asset quality is determined in relation to the level and severity of distribution of assets, recoveries, adequacy of provisions, non-performing assets, etc. Popular indicators of asset quality are loan default to total advances, recoveries to loan default ratios and non-performing loans to advance. Other indicators of asset quality are the ratio of non-performing loans to total loans (GNPA) and gross non-performing loans to gross advances ratio. NPLGA is more indicative of the quality of credit decisions made by bankers. Higher GNPA indicates the poor credit decision-making. According to the Aspal and Dhawan (2014)credit risk in the form of NPAs is one of the critical factors that have an effect on the financial well-being of a bank. The extent of the credit risk depends on the quality of resources possessed by a bank.

Management Efficiency:

Management effectiveness is another significant component of the CAMEL Model. The proportion in this section includes subjective analysis to measure the productivity and effectiveness of administration (Prasad and Ravinder, 2012). It refers to the proportion of non- premium users like are done by bank higher rate of such use suggests that bank administration is bad at controlling the unnecessary costs. Management of financial institution is usually evaluated in terms of, asset quality, earnings and profitability, liquidity, capital adequacy. In addition, performance evaluation consists of the ability to plan and react to changing circumstances, technical competence, leadership, compliance with set norms and administrative ability. Basically, administration rating is simply a blend of execution in the aforementioned areas. Management efficiency is used to assess administration's quality; it involves analysis of efficiency of management in generating business (top-line) and in maximizing profits (bottom-line) (Reddy, 2012).

Effective management is a standout amongst the most imperative components behind the financial institution's performance. Indicators of quality of administration, notwithstanding, are basically appropriate for individual organizations, and can't be effectively accumulated over the part. Moreover, given the subjective way of administration, it is hard to judge its soundness, just by taking a look at books of accounts of the banks. However, total expenditure to total income and operating expense to total expense helps in evaluating the administrative quality of the banking establishments. Efficient Administration is the most vital ingredient that ensures the smooth functioning of banks (Vijayakumar, 2012). Numerous indicators, however, Admin Expense to Interest Income Ratio, Gross Advances to Total Deposits Ratio and Assets Turnover Ratio are measuring performance and soundness of the management. The bank management efficiency guarantees the growth and survival of a bank (Karri, Meghani and Mishra, 2015). The management capability includes a variety of expenditures, such as salaries, employees compensation and training investment, reflects the administration policy stance. Aspal and Dhawan (2014) observed that the management efficiency is often expressed qualitatively through subjective evaluation of organizational discipline, management systems, quality of staff, control systems and others.

Earnings & Profitability

The earnings quality is a very important measure that defines the capability of a bank to earn reliably. It determines the profitability of banks and explains its sustainability and progress in earnings in the future (Prasad and Ravinder, 2012). It refers to the net benefit that is made by a bank in the wake of taking into all components. Higher acquiring suggests the bank is doing great yet one ought to look whether this procuring is by virtue of center managing an account that is premium wage or different earnings. The earning quality is significant measure which shows the quality of income in terms of income generated from advancing operation by a bank. Aspal and Dhawan (2014) defined high earnings quality should reflect the firm's current operating performance and a good indicator of future operating performance. Earnings and profitability are the single most considered figure in a company's financial accounts because they show a bank's profitability. Business quarterly and yearly incomes are normally contrasted with investigator appraisals and direction gave the business itself. Much of the time, when income doesn't meet both of those evaluations, a business' stock cost will have a tendency to drop. Then again, when real income beat gauges by a noteworthy sum, the offer cost will probably surge.

Earnings and profitability are the main source of the increase in capital base, is inspected with respects to interest rate policies and the adequacy of provisioning. Likewise, it additionally serves to help present and future operations of the Institutions. Indicators of earnings and profitability are ROA, ROE and Interest Income to Total Assets Ratio. The single best indicator used to measure earning is the Return on Assets (ROA), which is net income after taxes to total asset ratio.

According to the Reddy (2012) High returns on asset means greater returns earned on assets deployed by the bank. According to the Dang (2011) a consistent profit not only constructs the public confidence in the bank, but absorbs loan losses and provides sufficient provisions. Profitability proportions measure the capacity of a company to produce profits from revenue and resources.

Solid earnings and profitability profile of banks mirror the capacity to help present and future operations. All the more particularly, this decides the ability to absorb misfortunes, fund its extension, pay profits to its shareholders, and develop an adequate level of capital. Being front line of defense against the destruction of a capital base from misfortunes, the requirement for high profit and earnings can scarcely be overemphasized. Although diversifying pointers are utilized to fill the need, the best and most broadly utilize indicator is a Return on Assets (ROA). ROA is employed by establishments and banks to outfit them with an important instrument for evaluating their progress, including utilization of assets and financial quality (Haque, 2014). Then again, for inside and out examination, an alternate pointer Net Interest Margins (NIM) is likewise utilized. Chronically unfruitful money related establishment's hazard bankruptcy. Contrasted and most different pointers, inclines in gains can be hard to decipher for cars, abnormally high benefit can reflect excessive danger taking. To measure the profitability, Return on assets is characterized as the net benefits of the banks divided by the average aggregate resources. This ratio summarizes the capacity of the administration to create net income from the resources of the banks (De, 2013).

Liquidity:

A firm ought to guarantee that it doesn't experience the shortage or an abundance of liquidity to meet its short-term obligations. An investigation of liquidity is of real significance to both the inward and the outside analysts due to its close association with day-to-day operations of an organization. Liquidity plays an important role in the effective running of a business firm (Ibe, 2013).Liquidity means the presence of the cash or near cash form. This ratio shows the capacity of the bank to pay off the liabilities when they mature. In other words, the liquidity means the capability of the bank to transform non-cash items into cash as they needed. It indicates the cash position of the bank. In other words, the capability of the bank meets its customers day to day cash needs (Vijayakumar, 2012).Liquidity is the capacity of a financial establishment to respect all money installment duties as they fall due. These responsibilities can be met either by drawing from a stock of cash holdings, by utilizing current money inflows, by getting money or by changing over liquid resources into money.

Liquidity is an indispensable circumstance for any business. The inability to meet installment commitments on time can trigger liquidation and gives lenders the privilege to take ownership of the association's resources. Liquidity ratios are used to measure the position of the bank. The fluid resource contains a balance with institutions and money at call, cash in hand and short notice. The total resources contain the revaluation of all the resources (Prasad and Ravinder, 2012).Liquidity is considerably more essential for monetary establishments in light of the fact that they are especially powerless against sudden and prompt installment requests. This is the way of the loan making and deposit taking business. A bank can't stand to send away a client who needs to withdraw money from his record with a "possibly tomorrow". To stay in business, the bank must have the capacity to pay out legitimate withdrawals and credit asks for immediate.

In addition, in most of the everyday exchanges, the bank does not follow up for its own sake, e.g. Paying rent for bank workplaces or purchasing photocopy paper, yet rather works as a monetary mediator in the middle of savers and borrowers or as a payment agent for exchanges between organizations or people. Consequently, the disappointment of a huge money related organization can have expansive financial impacts on the whole national monetary framework. Indeed the disappointment of a little town bank will influence the dominant part of people in that town straightforwardly or in a roundabout way. Liquidity management has an important task to manage the appropriate liquidity in the banks due to competitive stress. The appropriate liquidity administration can be used to hedge Threat of liquidity and ensuring superior percentage of return on invested funds (Kumar and Sharma, 2014).

3.3 Data Analysis Tools

For the purpose of this analysis, financial ratios and statistical tools were applied to examine and compare the impact of independent variables on the dependent variables. Regression analysis is used in testing the hypotheses. The Pearson correlation coefficient is also used to examine the correlation between the study variables at the 5 % level of confidence according to the SPSS software package.

3.3.1 Descriptive Statistics

Descriptive Statistics contain certain measures, such as measures of dispersion or variability (standard deviation, minimum variable, maximum variable, range) and central tendency (mean) that are used to describe a data set. According to the Trochim (2006) Descriptive measures summarize a particular data set that can either represent a sample or population used for the research.

The measure of central tendency defined as the sum of all values in a data set divided by the total number of values in that data set. Standard Deviation is the measure of dispersion of data from its mean. It is calculated by taking the square root of the whole equation in which the sum of squared deviations from the mean of data is divided by the total number of values in a data set minus one. A higher standard deviation shows a higher dispersion of data from its mean and vice versa. Range is the difference between the maximum value and the minimum value in a data set. It shows the gap between

highest and lowest dispersion from the mean in the data set. Maximum Variable is the highest value in the data set. Minimum Variable is the lowest value in the data set.

3.3.2 Correlation Analysis

Correlation Analysis is a statistical tool which is used to measure the strength of the relationship between two variables. It is used to accept or reject the hypothesis. In this study, the Pearson Correlation Method has been used, which is the most common technique to measure the linear relationship between the independent and dependent variables. The correlation coefficient is indicated by r. The correlation coefficient values are always between -1 to 1, i.e. $-1 < r > +1$.

A Pearson correlation matrix shows the strength, significance and the direction of the relationships among all the variables. The correlation is derived by measuring the variation in one variable along with the variation in another variable. A correlation coefficient may be positive, negative or zero. If a correlation value is positive, then it indicates that the direction of variation of both variables is the same. If a correlation value is negative, then it indicates that the direction of variation of both variables is opposite to each other. Zero value indicates no correlation between the two variables and this denotes that both moves randomly. One important thing to be kept in mind is the significance of the correlation, which reveals the probability of occurrence of correlation between the two variables. If the value of "r" is equal to .05 or less, then it means that 95% chance exists that the correlation is significantly or true and there are 5% chances that the correlation is insignificant. If the value of "r"is equal to .01 or less, then it means that 99% chance exists that the correlation is significantly or true and 1% chance that the correlation is insignificant. A significance value beyond .05 is not accepted in research studies and indicates that there is an insignificant relationship between two variables.

If the correlation coefficient value "r" is equal to 0, then no relationship exists between the two variables. If the value of "r" is in between .01 to .09, then a negligible positive relationship exists between the two variables. If the value of "r" is in between -.01 to -.09, then a negligible negative relationship exists between the two variables. If the value of "r" is in between .10 to .29, then a low positive relationship exists between the two variables. If the value of "r" is in between -.10 to -.29, then a low negative relationship exists between the two variables. If the value of "r" is in between .30 to .49, then a moderate positive relationship exists between the two variables. If the value of "r" is in between -.30 to -.49, then a moderate negative relationship exists between the two variables. If the value of "r" is in between .50 to .69, then a substantial positive relationship exists between the two variables. If the value of "r" is in between -.50 to -.69, then a substantial negative relationship exists between the two variables. If the value of "r" is in between .70 to .89, then a strong positive relationship exists between the two variables. If the value of "r" is in between -.70 to -.89, then a strong negative relationship exists between the two variables. If the value of "r" is in between .90 to 1.0, then a very strong positive relationship exists between the two variables. If the value of "r" is in between -.90 to -1.0, then a very strong negative relationship exists between the two variables (Davis, 1971).

3.3.3 Regression Analysis

It is a statistical tool that measures the dependency between the dependent variable and a series of independent variables. In this study, the linear regression analysis is used. In regression analysis, the regression coefficient R shows the overall strength of the association between the dependent variable and the independent variables. The R square is the coefficient of determination, which demonstrations the degree to which the regression equation can explain the difference in the dependent variable caused by the independent variables. The value of R square is in between 0 and 1. A model and its predictive ability are considered relatively better if the value of R square is closer to one.

Adjusted R square value indicates the resultant predictive ability of the model due to the addition or subtraction of independent variables into the model. Its value will decrease if the model's predictive ability is decreased, due to the addition of an independent variable into the model. The standard error of estimate is also known as the standard error of regression, shows the level of accuracy of the predictions stated by the model. It shows that at an average, how far are the values of the independent variables dispersed away from the regression line. A model having a relatively small value of the standard error of estimate is considered as a better model.

The Analysis of Variance (ANOVA) table consists of the values of Sum of Squares, Mean Squares, F-Test, and p value. The value of Sum of Square indicates the amount of variation that exists between the values used in the model. The total sum of square value indicates the variation that exists within the observed data. A residual measure of the square indicates the variation that exists in the modeling errors. The sum of square value is compared with the total sum of square value and the residual sum of square value.

The degree of freedom refers to the number of observations among the sample that can be freely chosen from the total number of observations. The means of squares is the ratio of the sum of squares to the degree of freedom. The fitness of the whole regression model is specified by the F-test value. If the F-test value is significantly higher, then it shows that the dependent variable (Y) has a linear relationship with the independent variables of the model. It is not compulsory that a high F-test value means that all the independent variables have a linear relationship with the dependent variable. A high significant F-test may also show that only one independent variable has a linear relationship with the dependent variable.

The p value demonstrates that whether the overall regression model is statistically significant or not. If the p value is less than .05, then it indicates that the model is significant. The regression coefficient table indicates that how each independent variable affects the value of the dependent variable. In the coefficient table, the values of unstandardized Coefficients, Standard error, t-value and significance are given. The unstandardized coefficient value indicates the strength

of the relationship that exists between the dependent and the independent variable. The sign of the unstandardized coefficient shows the direction of the relationship. The standard error shows the precision of the strength of the relationship between the dependent and the independent variable. In other words, it shows the deviation from the parameters of its corresponding population.

The lower value of the standard error is better. The standardized coefficient beta value is useful because it allows comparison of those variables that are measured on a different scale. The standardized coefficient beta value indicates the change in the dependent variable due to the change in the standard deviations of the independent variables. The value of t statistics is important, as it decides whether a hypothesis will be accepted or rejected. If the t-value is above +2 or if it is below -2 then a null hypothesis is rejected, otherwise it cannot be rejected. The p value in the regression coefficient table shows the statistical significance of the relationship between the dependent and the independent variable. The constant gives a prediction of the value of the dependent variable, when the value of all the independent variable's value is zero. If the significance value (p value) for any variable is above .05, then the relationship of that variable with the dependent variable is considered as statistically insignificant. If the significance value of any variable is below .05 then such a relationship is considered as statistically significant.

4 RESULTS

Introduction

The reason for this portion meant to meet the general objective of assessing the execution of Pakistani commercial banks and secondly meeting the particular goal which was to create the impacts of CAMEL structure variables on bank execution. In this section objective is to examine the outcome and understanding whether there is a relationship between independent and dependent variable, whether the independent variables impacting on a dependent variable or not. To measure the relationship, Correlation and Regression investigation were utilized.

4.1 Descriptive Statistics

Table 1

Variables	Mean	Std. Deviation
TDE	11.6264	5.07230
NPLG	.1164	.09412
NPLE	.8129	.83824
AEII	2.0767	.65779
GATD	.6866	.15970
ROA	.0063	.01987
ROE	.0641	.30352
INT	.0131	.00603
CR	.0953	.03400
EPS	7.1431	8.01579

The results in Table 1 shows the descriptive statistics applied to the data of the banking industry of Pakistan for the period 2007 to 2013. A total of 70 observations have been gathered from 10 commercial banks for the data analysis. The total deposit to equity ratio of the banking sector of Pakistan in seven years had a maximum value of 24.07 and the minimum value of 1.43. Average total deposits to equity ratio were 11.62. The standard deviation of total deposits to equity ratio was found to be 5.07.

The non-performing loans to gross advances had a maximum value of 0.40 and the minimum value of 0.62. Average non-performing loans to gross advances ratio was 0.11. The standard deviation was found to be 0.09. The non-performing loans to equity had a maximum value of 4.96 and a minimum value of .00. The Average value of nonperforming loans to equity was found to be .8129. The standard deviation was 0.83.

The administrative expenses had a maximum value of 3.65 and the minimum value of 0.62. The Average administrative expense ratio was 2.07. The standard deviation was found to be0.65.The return on assets had a maximum value of.04 and the minimum value of .07. Average return on assets ratio was 0.006. The standard deviation was found to be 0.19.The return on equity had a maximum value of 0.28 and minimum value of 1.41. Average return on equity ratio was 0.06. The standard deviation was found to be0.30.

The interest income to total assets had a maximum value of 0.04 and the minimum value of .00. The Average ratio was .01. The standard deviation was found to be 0.006.The cash ratio had a maximum value of .22 and minimum value of .03. The Average cash ratio was 0.09. The standard deviation was found to be .03.The earnings per share had maximum value of 24.47 and a minimum value of 4.54. Average earnings per share were found to be 7.14. The standard deviation was 8.01.

4.2 Inferential Statistics

Table 2 Correlation Analysis

Variable	TDE	NPLG	NPLE	AEII	GATD	ROA	ROE	INT	CR	'S
TDE	1									
NPLG	-.342**	1								
NPLE	.322**	.586**	1							
AEII	.204	.438**	.447**	1						
GATD	-.391**	.355**	.212	.013	1					
ROA	-.148	-.614**	-.696**	-.594**	-.329**	1				
ROE	-.104	-.571**	-.809**	-.434**	-.335**	.823**	1			
INT	-.019	-.016	.094	-.550**	.195	-.034	-.082	1		
CR	.264*	-.197	-.145	-.108	-.360**	.163	.165	-.096	1	
EPS	-.337**	-.458**	-.472**	-.518**	-.368**	.743**	.441**	-.092	.166	

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

The Pearson's coefficient as shown in the table is used to verify the existence or non-existence of linear correlation between & among the quantitative variables indicated above of the 10 commercial banks for the period 2007 to 2013.

The correlation coefficient of total deposit to total equity with EPS is -.337, which indicates that there is a moderate negative relationship exists between the two variables. The p value is .004 which is less the .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is negative, which shows that if one variable changes, the other variable changes in the opposite direction.

The correlation coefficient of Non-Performing Loans to Gross Advances with EPS is -.458, which indicates that there is a moderate negative relationship exists between the two variables. The p value is .000 which is less the .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is negative, which shows that if one variable changes, the other variable changes in the opposite direction.

The correlation coefficient of Non-Performing Loans to shareholders equity with EPS is -.472, which indicates that there is a moderate negative relationship exists between the two variables. The p value is .000 which is less the .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is negative, which shows that if one variable changes, the other variable changes in the opposite direction.

The correlation coefficient of Admin expenses to interest income ratio with EPS is -.518, which indicates that there is a substantial negative relationship exists between the two variables. The p value is .000 which is less than .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is negative, which shows that if one variable changes, the other variable changes in the opposite direction.

The correlation coefficient of Gross Advances to total deposits ratio with EPS is -.368, which indicates that there is a moderate negative relationship exists between the two variables. The p value is .002 which is less than .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is negative, which shows that if one variable changes, the other variable changes in the opposite direction.

The correlation coefficient of ROA with EPS is .743, which indicates that there is a strong positive relationship exists between the two variables. The p value is .000 which is less than .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is positive, which shows that if one variable changes, the other variable changes in the same direction.

The correlation coefficient of ROE with EPS is .441, which indicates that there is a moderate positive relationship exists between the two variables. The p value is .000 which is less than .01, indicating that the correlation value is significant at 99% confidence level. The direction of the correlation is positive, which shows that if one variable changes, the other variable changes in the same direction.

The correlation coefficient of interest income to total assets ratio with EPS is -.092, which indicates that there is a negligible negative relationship exists between the two variables. The p value is .447 which is greater than .05, indicating that the correlation value is insignificant.

The correlation coefficient of cash ratio with EPS is .166, which indicates that there is a low positive relationship exists between the two variables. The p value is .169 which is greater than .05, indicating that the correlation value is insignificant.

4.3 Regression Analysis:

Table 3: Coefficients

Predictors	Outcomes		
	Beta	**t**	**p**
TDE	-1.226	-9.418	.000
NPLG	-48.481	-6.444	.000
NPLE	4.382	4.342	.000
AEII	-2.186	-2.193	.032
GATD	-20.412	-7.460	.000
ROA	253.424	6.317	.000
ROE	-9.403	-3.488	.001
INT	-235.431	-2.802	.007
CR	23.269	2.038	.046

N = 70, F = 54.654, R Square = .891, Dependent Variable EPS

The model summary in the Table provides the measures that show the extent to which the independent variables (predictors) can predict the dependent variable(outcome) and also how well the overall model used in our study fits (from the variable aspect). The value of R in the first column indicates the strength of the relationship between the dependent variable: banks performance measured through EPS and the independent variables included in the model: Capital Adequacy, Asset Quality, Management Efficiency, Earnings and Profitability and Liquidity. The proxies used to measure the independent variables have been mentioned in chapter 2. In addition, the Table shows that the value of R is .944, which indicates that there is a strong relationship between the dependent variable and the independent variables. The value ofR2 (R square) is .891, which indicates that 89.10% of the variance in the dependent variable is caused by the independent variables. The Table shows that the F value is 54.664, which is a high value, having a significant value .0000, which is less than .05. This indicates that the overall model is significant at 95 % confidence level.

The table shows the regression coefficient of the model. It can be seen that the unstandardized coefficient value of Total Deposit to total Equity is -1.226. It indicates that a 1 unit increase in TDE will decrease the bank performance by 1.226 units. This result is statistically significant because the t-value is -9.418, which is beyond the range of -2 to +2. On this basis, the H1 cannot be rejected. The *p* value of TDE is .000. Thus, the regression result of TDE as a determinant of a bank's performance was statistically significant.

The unstandardized coefficient value of Non-Performing Loan to Gross Advances is -48.481. It indicates that a 1 unit increase in Non-Performing Loan to Gross Advances will decrease the value of a bank's performance by 48.481 units. This result is statistically significant because the t-value is -9.418, which is beyond the range of -2 to +2. On this basis, the H2 cannot be rejected. The *p* value of Non-Performing Loan to Gross Advances is .000, which is less than .05. Thus, the regression results of Non-Performing Loan to Gross Advances as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Non-performing Loan to Shareholder's Equity is 4.382. It indicates that 1 unit decrease in Non-performing Loan to Shareholder's Equity result in an increase in the value of a bank's performance 4.382. This result is statistically significant because the t-value is 4.342, which is beyond the range of -2 and +2. On this basis, the H3 cannot be rejected. The *p* value of NPLE is .000, which is less than .05. Thus, the regression results of Nonperforming Loan to Shareholder's Equity as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Admin Expenses to Interest Income is -2.186. It indicates that a 1 unit increase in Admin Expenses to Interest Income will decrease the value of bank performance by 2.186 units. This result is statistically significant because the t-value is -2.193, which is beyond range of -2 to +2. On this basis, the H4 cannot be rejected. The *p* value of Admin Expenses to Interest Income is .032, which is less than .05. Thus the regression results of Admin Expenses to Interest Income as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Gross Advances to Total Deposits is -20.412. It indicates that a 1 unit increase in Gross Advances to Total Deposits will decrease in the value of a bank's performance by 20.412 units. This result is statistically significant because t-value is -7.460, which is beyond the range of -2 to +2. On this basis, the H5 cannot be rejected. The *p* value of Gross Advances to Total Deposits is .000, which is less than .05. Thus the regression results of Gross Advances to Total Deposits as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Return on Assets is 253.424. It indicates that a 1 unit increase in Return on Assets will increase in the value of a bank's performance by 253.424 units. This result is statistically significant because t-value is 6.317, which is beyond the range of -2 to +2.On this basis, the H6cannot be rejected. The *p* value of Return on Assets is .000, which is less than .05. Thus the regression results of Return on Assets as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Return on Equity is -9.403. It indicates that a 1 unit increase in Return on Equity will decrease in the value of a bank's performance by 9.403 units. This result is statistically significant because t-value is -3.488, which is beyond the range of -2 to +2. On this basis, the H7 cannot be rejected. The *p* value of Return on Assets is .001, which is less than .05. Thus the regression results of Return on Equity as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Interest Income to Total Assets Ratio is -235.431. It indicates that a 1 unit increase in Interest Income to Total Assets Ratio will decrease in the value of a bank's performance by 235.431 units. This result is statistically significant because t-value is -2.802, which is beyond the range of -2 to +2. On this basis, the H8 cannot be rejected. The *p* value of Interest Income to Total Assets Ratio is .007, which is less than .05. Thus the regression results of Interest Income to Total Assets Ratio as a determinant of a bank's performance were statistically significant.

The unstandardized coefficient value of Cash Ratio is 23.269. It indicates that a 1 unit increase in Cash Ratio will increase in the value of a bank's performance by 23.269 units. This result is statistically significant because t-value is 2.038, which is beyond the range of -2 to +2. On this basis, the H9 cannot be rejected. The *p* value of Cash Ratio is .046, which is less than .05. Thus the regression results of Cash Ratio as a determinant of a bank's performance were statistically significant.

Clearly the outcomes demonstrated that all the CAMEL variables had a significant effect on the execution of banks amid the period under study at any rate, at 5% test level. This implies that CAMEL parameters influence the execution of commercial banks significantly.

5 DISCUSSION

This section contains discussion on the basis of the findings of the study, which will lead to acceptance or rejection of the hypothesis. While drawing conclusions from the research, some important recommendations are formulated for future references / guidance.

H1:There is a significant negative impact of Total Deposit to Total Equity ratio on the Bank's performance.

H1o:There is a significant positive impact of Total Deposit to Total Equity ratio on the Bank's performance.

The first hypothesis of the study at hand states that the total Deposit to total Equity ratio has a significant impact on Bank's performance. As mentioned earlier in the Chapter 2, total Deposit to total Equity ratio has been used as a measure of Capital adequacy. For the purpose of testing the hypothesis, a regression model is used with intent to study the impact of Capital adequacy on Bank's performance. In the regression model, earning per share is used as a measure of the Bank's performance to test the significance of Capital adequacy with it. It is observed that Capital adequacy had a t-value -9.418 and its p value is .000. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable Capital adequacy. In other words, Capital adequacy has a significant impact on the bank's performance. Our Results are consistent with the studies of Pastory et al. (2013); Frederick (2015); Guisse (2012); Ikpefan (2013); Barnor and Odonkor (2013). The Coefficient correlation value shows a negative relationship between Total Deposit to Total Equity ratio and the Bank's performance. It means that one variable is increasing and the other variable is decreasing. This implies that domestic banks are functioning over-cautiously by neglecting possible profitable endeavor. It shows that, setting up the high capital, administrative necessity has a negative effect on bank's execution, if not balanced by expanding investments. Moreover, when the Capital Adequacy expands, productivity will diminish. In other words, when the banks build the utilization of Equity, they will enroll more misfortunes. The clarification of this sensation can be firstly the sum they are paying to their shareholders as a dividend is greater than what they are creating from it as a benefit. Besides, the facts could confirm that they are utilizing retain earnings without putting it in a new arrangement that will give more benefit to the organization. Furthermore, the negative relationship suggests that, as more capital is set aside as a cradle for banks wellbeing; it influences the execution of banks. The results of the study, lies in the way that the negative relationship between capital adequacy and execution highlights the way that different endeavors by the controllers to audit regularly the capital base of the keeping money division is not borne out of the plan to enhance the gains of the banks. Rather to maintain stability, security against contributors and trust in the keeping money industry.

H2: There is a significant negative impact of Non-performing Loans to Gross Advances ratio on the Bank's performance.

H2o: There is a significant positive impact of Non-performing Loans to Gross Advances ratio on the Bank's performance.

The second hypothesis of the study at hand states that the NPL to Gross Advances ratio has a significant impact on Bank's performance. As mentioned earlier in the Chapter 2, NPL to gross advances ratio has been used as a measure of Asset quality. For the purpose of testing the hypothesis, a regression model is used with intent to study the impact of Asset quality on Bank's performance. In the regression model, earning per share is used as a measure of the Bank's performance to test the significance with it. It is observed that Asset quality had a t-value -6.444 and its p value is .000. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable Asset quality. In other words, Asset quality has a significant impact on the bank's performance. Despite the fact that our findings are consistent with the past studies (see for instance: Olweny and Shipho, 2011; Anjili, 2014; Kaddumi, 2015; Abata, 2014), we have succeeded to find theoretical support for our results. The literature review on asset quality as a determinant of a bank`s performance indicates that it has a significant impact on the bank`s performance. Our correlation coefficient shows negative significance which means that when one variable moves in a direction the other variable moves in completely opposite directions. This is because when banks give loans to the individuals or to the firms and they cannot pay it back to the bank as per their understanding; it affects the bank's profitability and its earnings, the cost increases for the banks which ultimately decreases its earning capacity.

H3: There is a significant negative impact of Non-performing Loans to Shareholder Equity ratio on the Bank's performance.

H3o: There is a significant positive impact of Non-performing Loans to shareholder equity ratio on the Bank's performance.

The third hypothesis of the study at hand states that the NPL to shareholder's equity ratio has a significant impact on Bank's performance. As mentioned earlier in the Chapter 2, NPL to shareholders equity ratio has been used as a measure of Asset quality. For the purpose of testing the hypothesis, a regression model is used with intent to study the impact of Asset quality on Bank's performance. In the regression model, earning per share is used as a measure of the Bank's performance to test the significance with it. It is observed that Asset quality had a t-value 4.342 and its p value is .000. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable Asset quality. In other words, Asset quality has a significant negative impact on the bank's performance. The negative correlation between non-performing loans to shareholders equity and earnings per share shows that whenever non-performing loans increases earnings decreases because interest charged on loans is main source of income for banks. Whenever non-performing loans increases investor's confidence decreases and therefore they feel hesitate to invest in such circumstances. As investment decreases profitability also decreases and ultimately performance decreases.

H4: There is a significant negative impact of Admin expense to interest income ratio on the Bank's performance.
H4o: There is a significant positive impact of Admin expense to interest income ratio on the Bank's performance.

The fourth hypothesis of this study is Admin Expenses to Interest Income ratio, which has a significant negative association with the Bank's performance. As mentioned earlier Chapter 2, Admin Expenses to Interest Income has been used as a measure of the Bank's performance. For the purpose of testing the hypothesis, a regression model was used with the purpose to study the impact of Admin Expenses to Interest Income Ratio on Bank's performance. In the regression model, Admin Expenses to Interest Income was used as a measure of the Bank's performance to test the significance of the Bank's performance with it. It was observed that Admin Expenses to Interest Income had a t-value -2.193 and its *p* value was .032. The t-value is beyond the range of -2 and +2, whereas the p value was within the significance level of .05. It is concluded that the alternative hypothesis cannot be rejected and the same time the null hypothesis cannot be accepted as well, since the results reflects the significant relationship between the dependent variable Bank's performance and the independent variable Admin Expenses to Interest Income. In other words, there is a significant association between Admin Expenses to Interest Income with Bank's performance. The correlation results indicate that a significant negative and a substantial negative association exist between Admin Expenses to Interest Income and Bank's performance.

The correlation is negative because when the Admin Expenses to Interest Income increase the cost of the bank's increase which decreases the performance of Banks. Our findings (regression results for Admin Expenses to Interest Income and Bank's performance association) are consistent with the studies of Davydenko (2010), Ongore (2013), Sufian and Chong, (2008) and Aftab, Samad and Husain (2015).

H5: There is a significant negative impact of Gross advances to total deposits ratio on the Bank's performance.
H5o: There is a significant positive impact of Gross advances to total deposits ratio on the Bank's performance.

The fifth hypothesis of this study is Gross Advances to Total Deposits Ratio which has a significant negative association with the bank's performance. As mentioned earlier Chapter 2, Gross Advances to Total Deposits Ratio has been used as a measure of the Bank's performance. For the purpose of testing the hypothesis, a regression model was used with the purpose to study the impact of Gross Advances to Total Deposits Ratio on Bank's performance. In the regression model, Gross Advances to Total Deposits Ratio was used as a measure of the Bank's performance to test the significance of the Bank's performance with it. It was observed that Gross Advances to Total Deposits Ratio had a t-value -7.460 and its p value was .000. The t-value is beyond the range of -2 and +2, whereas the p value was within the significance level of .05. It is concluded that the alternative hypothesis cannot be rejected and the same time the null hypothesis cannot be accepted as well, since the results reflects the significant relationship between the dependent variable Bank's performance and the independent variable Gross Advances to Total Deposits Ratio. In other words, there is a significant association between Gross Advances to Total Deposits Ratio with Bank's performance. The correlation results indicate that a significant negative and a moderate association exist between Gross Advances to Total Deposits Ratio and Bank's performance. The correlation is negative, which shows that one variable increase opposite variable decrease. The reason is that when deposit increase in banks and they are not properly utilized, than have to pay the interest on that deposit. When the banks pay interest with the utilization of deposit than cost increase, which decrease the earnings and finally it decrease the Bank's performance.

H6: There is a significant positive impact of Return on Assets on the Bank's performance.
H6o: There is a significant negative impact of Return on Assets on the Bank's performance.

The sixth hypothesis of the study at hand states that Return on Assets has a significant impact on Bank's performance. As mentioned earlier in the Chapter 2, Return on Assets has been used as a measure of Earnings & Profitability. For the purpose of testing the hypothesis, a regression model is used with the intent to study the impact of Earnings & Profitability on the bank's performance. In the regression model, earnings per share are used as a measure of

the Bank's performance to test the significance of Earnings & Profitability with it. It was observed that Return on Assets had a t-value 6.317 and its p value is .000. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable Earnings & Profitability. In other words, Earnings & Profitability have a significant impact on the bank's performance. Our Results are consistent with the study of El-Bannany (2011); Heikal et al. (2014) and Azizi and Sarkani (2014). The Coefficient correlation value shows a positive relationship between Return on Assets and the Bank's performance. It means that one variable is increasing and the other variable is also increasing in the same direction. It means that the management of the banks utilizes their assets efficiently and effectively.

H7:There is a significant positive impact of Return on Equity on the Bank's performance.

H7o: There is a significant negative impact of Return on Equity on the Bank's performance.

The seventh hypothesis of the study at hand states that Return on Equity has a significant impact on Bank's performance. As mentioned earlier in the Chapter 2, Return on Equity has been used as a measure of Earnings & Profitability. For the purpose of testing the hypothesis, a regression model is used with the intent to study the impact of Earnings &Profitability on the Bank's performance. In the regression model, earnings per share were used as a measure of the Bank's performance to test the significance of Earnings & Profitability with it. It was observed that Return on Equity had a t-value -3.488 and its p value is .001. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable Earnings & Profitability. In other words, Earnings & Profitability have a significant impact on the bank's performance. Our Results are consistent with the study of Taani and Banykhaled (2011); Heikal et al. (2014) and Azizi and Sarkani (2014). The Coefficient correlation value shows a positive relationship between Return on equity and the Bank's performance. It means that one variable is increasing and the other variable is also increasing in the same direction.

H8:There is a significant negative impact of Interest Income to Total Assets Ratio on the Bank's performance.

H8o:There is a significant positive impact of Interest Income to Total Assets Ratio on the Bank's performance.

The eighth hypothesis of the study at hand states that the interest income to total assets ratio has a significant negative impact on Bank's performance. As mentioned earlier in the Chapter 2, interest income to total assets ratio has been used as a measure of a bank's performance. For the purpose of testing the hypothesis, a regression model is used with intent to study the impact of Earnings and Profitability on Bank's performance. In the regression model, earning per share is used as a measure of the Bank's performance to test the significance of earnings and profitability with it. It is observed that earnings and profitability had a t-value -2.802and its p value is .007. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable earnings and profitability. In other words, earning and profitability have a significant impact on the bank's performance. The above mentioned results are consistent with the research carried out by Olweny and Shipho (2011) the outcome shows that there is a negative, but significant association between operational cost effectiveness and firm performance as interest income is the main source of income for banks. Interest income increases consequently profitability increases.

H9:There is a significant positive impact of Cash Ratio on the Bank's performance.

H9o: There is a significant negative impact of Cash Ratio on the Bank's performance.

The ninth hypothesis of the study at hand states that the cash ratio has a significant impact on Bank's performance. As mentioned earlier in the Chapter 2, cash ratio has been used as a measure of a bank's performance. For the purpose of testing the hypothesis, a regression model is used with intent to study the impact of cash ratio on Bank's performance. In the regression model, Earning per Share is used as a measure of the Bank's performance to test the significance of cash ratio with it. It is observed that cash ratio had a t-value 2.038and its p value is .046. The t-value is beyond the range of -2 and +2, whereas the p value is below the significance level of .05. It is concluded that the null hypothesis can be rejected and at the same time the alternative hypothesis can be accepted. The results reflect a significant relationship between the dependent variable Bank's performance and the independent variable cash ratio. In other words, Liquidity has a significant impact on the bank's performance. Results are in accordance with previous studies carried out by Anoh (2012); Agbada and Osuji (2013); Akanbi and Ajagbe (2012); Lartey et al. (2013), Olagunju et al. (2011) and Azizi and Sarkani (2014).These discoveries support Bourke (1989) who discovered some proof of a positive relationship between fluid resources and bank benefit for 90 banks in Europe, Australia North America and from 1972 to 1981. In the perspective of the way that liquidity has some measure of direction on the productivity of a bank, it is imperative that banks deal with their liquidity exceptionally well. At the point when banks hold satisfactory fluid resources, their benefit would progress. Satisfactory liquidity helps the bank minimize liquidity danger and budgetary emergencies. The bank can assimilate any conceivable unforeseen stun brought on by the surprising requirement for a reduction in liabilities or the increment in resources side of the Statement of Financial Position. Then again, if fluid resources are held unreasonably, productivity could reduce. Fluid resources for the most part have no or minimal enthusiasm producing limit. The opportunity expense

of holding low-return resources would in the long run exceed the advantage of any increment of the bank's liquidity flexibility as seen in financing market.

5.10 Summary of Discussion

To sum up, the correlation analysis and regression results have indicated that Bank's performance is significantly affected by Capital adequacy, Asset Quality, Management Efficiency, Earnings & Profitability and Liquidity. Although our correlation results have shown that interest income to total assets and cash ratio have a positive but statistically insignificant correlation with Bank's performance, However the regression results have shown that these two independent variables are statistically significant with a Bank's performance. On the basis of our findings, the hypothesis 1, 2, 3, 4, 5, 6, 7, 8, 9 have been accepted and confirmed to be true. It means that null hypothesis can be rejected and alternative hypothesis can be accepted because all hypotheses have statistical significance with Bank's performance.

Summary of Accepted/Rejected Hypothesis

Hypothesis	Statement	Result
H1	There is a significant negative association between Total Deposit to Total Equity ratio and the Bank's performance.	Accepted
H2	There is a significant negative association between Non-performing Loans to Gross Advances ratio and the Bank's performance.	Accepted
H3	There is a significant negative association between Non-performing Loans to Shareholder Equity ratio and the Bank's performance.	Accepted
H4	There is a significant negative association between Admin expense to interest income ratio and the Bank's performance.	Accepted
H5	There is a significant negative association between Gross advances to total deposits ratio and the Bank's performance.	Accepted
H6	There is a significant positive association between Return on Assets and the Bank's performance.	Accepted
H7	There is a significant positive association between Return on Equity and the Bank's performance.	Accepted
H8	There is a significant negative association between Interest Income to Total Assets Ratio and the Bank's performance.	Accepted
H9	There is a significant positive association between Cash Ratio and the Bank's performance.	Accepted
	Total number of Hypotheses:	**9**
	Accepted:	**9**
	Rejected:	**0**

Conclusion

In this research, the impact of CAMEL model parameters on Bank performance has been analyzed. CAMEL model parameters, for example, Capital Adequacy, Asset quality, Management efficiency Earnings & Profitability and Liquidity are considered as independent variable while an earnings per share as a measure of bank performance is considered as the dependent variable. The sample size of this research is the 10 commercial banks operating in Pakistan. The financial data of 7 years (from 2007 to 2013) were collected from the official website of the banks, annual reports and from other related websites. The study utilized numerous statistical tools like regression analysis, descriptive analysis, and correlation analysis to analyze the data and interpret the findings. The results showed that total deposit to equity, non-performing loans to gross advances, non-performing loans to equity, Admin Expenses to Interest Income Ratio, Gross Advances to Total Deposits Ratio were significantly but negative correlated with a bank's performance. The Return on Assets and Return on Equity were significantly and positively correlated with a bank's performance. The interest income to total assets ratio is statistically insignificant with bank's performance, whereas the regression result show that INT is statistically significant with bank's performance. The cash ratio is also showing insignificant correlated bank's performance, whereas the regression result shows that the cash ratio is statistically significant with a bank's performance. The finding of this study was consistent with the finding of previous studies and sported the theories. It means that null hypothesis can be rejected and alternative hypothesis can be accepted because all hypotheses have statistical significance with the Bank's performance. It is concluded that at this point of time CAMEL model has a significant impact on Bank's performance. The findings of this research will be very helpful for the management of the banks in the banking industry of Pakistan, who can without any doubt focus on these key determinants of the CAMEL model to measure the performance and take appropriate decisions. The investors and shareholders can also assess the Bank's performance in order to make right and timely investment decisions.

Recommendations

On the basis of the findings of the study, it recommends that:

i) The banks should improve their capital base and maintain adequate capital adequacy ratio, lower the ratio more the performance of the banks.

ii) The bank should decrease their nonperforming loan in order to improve their asset quality and limiting the loan outstanding.

iii) The administration of the bank should manage the cost of the bank, and the cost to income ratio should be in a reasonable range. The administration of the bank should pay more consideration of its cost, and make sure the costs of the bank are utilized in the sensible way.

iv) The bank should increase their net profit and improve their net interest margin, and maximize the income of loan product.

v) The bank should try to get more deposits and keep the right amount of liquid assets to increase its liquidity.

For asset quality banks need to enhance their procedures for screening, credit clients and observing of credit danger. This is a critical indicator on the grounds that the banks have confronted difficult issues with non-performing credits in the past which prompted the breakdown of numerous banks. Then again banks ought to concentrate on enhancing their capital levels so as to enhance their financial execution. This will empower the banks to be cushioned against outside stuns, as well as to exploit business open incredibly and expand their budgetary execution in the process. Income diversification can be accomplished by expanding interest income, charges and commissions and foreign exchange activities.

Recommendation for future studies

Further studies could use different ratios to represent each factor of CAMEL, for example, the shareholder's equity to assets ratio could represent the capital adequacy instead of the risk-weighted capital adequacy ratio. Also, more ratios could be included to represent each factor of CAMEL. Further studies also could extend the period of data observed and also change the frequency of data used and this might offer a different result. The restriction of the present study is that it is limited to the investigation of private sector banks working in Pakistan. The CAMEL model can be applied to the investigation of the financial execution of public sector banks and additionally non-banking financial organizations for further analysis. Accordingly, in the further research one may need to consider this examination as a source of perspective to extend the scope and enhance the consequences of the exploration.

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Appendix

List of Operational Banks in Pakistan

Sr#	Name of Bank	Website
A	**Public Sector Commercial Banks**	
1	FIRST WOMEN BANK LIMITED	www.fwbl.com.pk
2	NATIONAL BANK OF PAKISTAN	www.nbp.com.pk
3	SINDH BANK LIMITED	www.sindhbankltd.com
4	THE BANK OF KHYBER	www.bok.com.pk
5	THE BANK OF PUNJAB	www.bop.com.pk
B	**ISLAMIC BANKS**	
1	ALBARAKA BANK (PAKISTAN) LIMITED	www.albaraka.com.pk
2	BANKISLAMI PAKISTAN LIMITED	www.bankislami.com.pk
3	BURJ BANK LIMITED	www.burjbankltd.com
4	DUBAI ISLAMIC BANK	www.dibpak.com
5	MEEZAN BANK LIMITED	www.meezanbank.com
C	**PRIVATE BANKS**	
1	ALLIED BANK LIMITED	www.abl.com.pk
2	ASKARI BANK LIMITED	www.askaribank.com.pk
3	BANK AL HABIB LIMITED	www.bankalhabib.com
4	BANK ALFALAH LIMITED	www.bankalfalah.com

5	FAYSAL BANK LIMITED	www.faysalbank.com.pk
6	HABIB BANK LIMITED	www.habibbankltd.com
7	HABIB METROPOLITAN BANK LIMITED	www.hmb.com.pk
8	JS BANK LIMITED	www.jsbl.com
9	KASB BANK LIMITED	www.kasbbank.com
10	MCB BANK LIMITED	www.mcb.com.pk
11	NIB BANK LIMITED	www.nibpk.com
12	SAMBA BANK LIMITED	www.samba.com.pk
13	SILK BANK LIMITED	www.silkbank.com.pk
14	SONERI BANK LIMITED	www.soneri.com
15	STANDARD CHARTERED BANK (PAKISTAN) LTD	www.standardchartered.com
16	SUMMIT BANK LIMITED	www.summitbank.com.pk
17	UNITED BANK LIMITED	www.ubl.com.pk
D	**FOREIGN BANKS**	
1	BARCLAYS BANK PLC	www.barclays.pk
2	CITIBANK N.A. - PAKISTAN OPERATIONS	www.citibank.com.pk
3	DEUTSCHE BANK AG - PAKISTAN OPERATIONS	www.db.com
4	HSBC BANK MIDDLE EAST LIMITED – PAKISTAN	www.hsbc.com.pk
5	INDUSTRIAL AND COMMERCIAL BANK OF CHINA LIMITED – PAKISTAN BRANCHES	www.icbc.com.pk
6	THE BANK OF TOKYO-MITSUBISHI UFJ LIMITED - PAKISTAN OPERATIONS	www.btm.co.jp
E	**DEVELOPMENT FINANCIAL INSTITUTIONS**	
1	HOUSE BUILDING FINANCE CORPORATION	www.hbfc.com.pk
2	PAIR Investment Company Limited	www.pairinvestment.com
3	PAK BRUNEI INVESTMENT COMPANY LIMITED	www.pakbrunei.com.pk
4	PAK LIBYA HOLDING COMPANY LIMITED	www.paklibya.com.pk
5	PAK OMAN INVESTMENT COMPANY LIMITED	www.pakoman.com
6	PAK-CHINA INVESTMENT COMPANY LIMITED	www.pakchinainvest.com
7	PAKISTAN KUWAIT INVESTMENT COMPANY LIMITED	www.pkic.com
8	SAUDI PAK INDUSTRIAL &AGRICULTURAL INVESTMENT COMPANY LIMITED	www.pakoman.com
F	**SPECIALIZED BANKS**	

1	INDUSTRIAL DEVELOPMENT BANK OF PAKISTAN	www.idbp.com.pk
2	SME BANK LIMITED	www.smebank.org
3	THE PUNJAB PROVINCIAL COOPERATIVE BANK LTD	www.ppcbl.punjab.gov.pk
4	ZARAI TARAQIATI BANK LIMITED	www.ztbl.com.pk
G	**MICRO FINANCE BANKS / INSTITUTIONS**	
1	ADVANS PAKISTAN MICROFINANCE BANK LIMITED	www.advansgroup.com
2	APNA MICROFINANCE BANK LIMITED	www.apnabank.com.pk
3	FINCA MICROFINANCE BANK LIMITED	www.kmfbank.com
4	KHUSHHALI BANK LIMITED	www.khushhalibank.com.pk
5	NRSP MICROFINANCE BANK LIMITED	www.nrspbank.com
6	PAK OMAN MICROFINANCE BANK LIMITED	www.pomicro.com
7	TAMEER MICRO FINANCE BANK LIMITED	www.tameerbank.com
8	THE FIRST MICRO FINANCE BANK LIMITED	www.mfb.com.pk
9	U MICROFINANCE BANK LIMITED	www.ubank.com.pk
10	WASEELA MICROFINANCE BANK LIMITED	www.waseelabank.com

Source: "State Bank of Pakistan"