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### ABSTRACT

This study investigates the impact of external factors and internal factors on commercial bank performance listed on Pakistan Stock Exchange. Sample size of nine Pakistani commercial banks listed on Pakistan Stock Exchange i.e. National Bank of Pakistan, Habib Bank Limited, MCB Bank Limited, Allied Bank Limited, United Bank Limited, Meezan Bank Limited, Bank Alfalah Limited, The Bank of Punjab, Bank Al Habib Limited is selected. This sample represent more than 80% of total population of commercial banks listed on Pakistan Stock Exchange. Inflation, Gross Domestic Product (GDP), Policy Rate through Monetary Policy are taken as external factors. Non-Performing Loan through NPL ratio, Deposit/Borrowing, Advances/Investments are taken as internal factors. Panel data of five years from 2013 to 2018 for internal and external factors is collected. Data for internal factors is selected from annual reports of these nine commercial banks. Data for external factors i.e.data for inflation is collected from bureau of statistics, data for policy rate is collected from monitory policy and data for GDP is taken from State Bank of Pakistan. Balanced Panel data is used for empirical study. Panel least square regression method is used to estimate the impact of internal factors i.e. Advances/Investments, Deposit/Borrowing, NPL and external factors i.e. inflation, policy rate, GDP rate on bank performance which is measured through return on assets, return on equity and earning per share. The regression equations are analyzed by checking fixed and random effect which is inhibited by applying the Haussmann test, Random effect is used in this study. By employing a panel data regression model with the random effect technique, empirical result of the study were obtained. The empirical results of the study indicates that Advances/Investment, Deposit, GDP has positive impact on bank performance while Borrowing, NPL has negative impact bank performance. Policy rate have no impact on bank performance.

# **CHAPTER 1 INTRODUCTION**

# **1.1 BACKGROUND OF THE PROBLEM**

The bank: an institution that deals with monitory and financial matters. The word bank is from Italian which is called Banco. The meaning of banco is a place where people can keep money, exchange money, and lend money. According to banking Ordinance 1962, banks accept deposits for the money from the public for lending / investing and it will be repaid whenever depositor demands and will be paid through cheque/bank draft or any other means.

The Management of corporate entities and financial experts, researchers, the general public has a keen attraction to know the financial performance of the companies (Omondi, 2013).

The Banking industry is the lifeblood of today's the trade and business. Banks provide them the main source of liquidity and loans. Globalization has changed the concept in which efficiency is more the most important for banks which are financial institutions and also for non-financial institutions. Banks majorly depend on how they are competitive in their marketing policy which defines their achievement and development

Banks are playing a vital role in the uplifting economy. Banks are the source of funds required to meet the financing needs of individuals and businessmen. Banks are also the custodian of surplus funds of individuals and businessmen. Banks have made easy to perform financing transaction i.e Funds Transfer, Bills Collections, Payments, etc.

Pakistani Banks have achieved marvelous progress in the last ten to fifteen years and have extended their operation from major cities to small cities and increased their asset and liabilities base.

The numbers of scheduled banks operating in Pakistan are 34 and the number of branches stood at 13,039 at the end of June 2017 (SBP 2017).

Numerous factors have a positive and negative impact on bank performance. Some are internal factors/variables i.e. Advances, Investments, NPL, Deposit, Borrowing, Non-Interest Income, Interest Income, Administrative Expenses and some are external factors i.e. Inflation, Gross Domestic Product, State Bank Policy Rate and Exchange rate.

### **1.2 IMPORTANCE OF BANKING SYSTEM FOR ECONOMY**

Economic development is the central purpose of countries all over the countries for more than the last 50 years than half of the century. Developing countries (like Pakistan) are suffering from many economic and financial problems like poverty, unemployment, the standard of living is low and rice in prices of different commodities. Hence such nations always strive for maintaining economic progression to escalate their national income and to improve their living standards by providing more job and investment opportunities. Financing investment and production are the prerequisite requirements of the development process. The banking industry is playing an important part in the economic development of a country. Further, there is a tendency in the banking industry that is leading to growth in economic development for the economy of a country. These phenomena have been established by many experimental researchers all over the world. Resultantly, the growth of economy philosophy trusts that financial organizations particularly banks are a valuable tool for improving the productivity of the economy and their significant local source of liquidity for a country and especially those countries which are at the initial stage of economic prosperity.

The banking channel is vital for the growth of the economy of a country in many respects. It is important because of its capability of attracting and gathering deposits from investors. It is important as it encourages investment and production by providing loans. It is also important because of its capability of generating economic expansion to other economic sectors like Industry, Agriculture, and trade sectors. It is important for its mediating role between borrowers and savers. Lastly, the banking industry always keeps a significant part in the formation of initial capital for investment in financial projects. The banking sector is a substantial segment of the economic and fiscal system in most of the states. (San & Heng 2013)

According to Alkhazaleh & Almsafir (2014) banks keep an essential part in promoting the development and growth of the economy. Firstly, by attracting savings and then utilizing these accumulated funds in lending the most important and creative sectors of the economy. Ntow & Laryea (2012) asserted that the banking industry is vital for the financials sector, predominantly in the economy which is in the developing phase at which the capital market is weak and not well-developed. The banking sector serves as an important source of finances and investment for enterprises in the economy of the countries in which capital markets are weak. Nkegbe & Yazidu

(2015) described that the performance of banks is generally measured from their profit that banks earned during the financial period. Shareholders and customers of the banks are interested in the profitability of the banks and these are essential for sustainability and growth.

As claimed by Hussain and Bhatti (2010) the financial institutions act the most important for trading and business in the modern era because it provides a major source of finance and investment. Moreover, the increasing spectacle of globalization has flourished the idea of the economy the efficiency is more important for non-financial institutions and financial institutions banks are part of financial institutions. Banks are dependent on intensive marketing goals that result in their achievement, growth, and development. The principles of the banking structure have transformed into a new age than that of the previous years.

### **1.3 BANKING SYSTEM IN PAKISTAN**

(KPMG, 2020) Despite the overall economic slowdown, the calendar year ended 31 December 2019 provided to be an exceptional year for the banking sector in Pakistan with overall profitability increasing by approximately 27.5%. Islamic banking segment performed exceptionally with 90.6% increase in profitably.

The key driver for the stellar performance of the banking sector was the significant increase in interest rates. The banking spread of banks included in the report increased to 5.67% from 1.41% in 2018. According to SBP statistical publication weighted average lending rate in 2019 was 11.7% compared to 8.2% in 2018 and average deposit rate in 2019 was 5.9% compared to 3.8% in 2018. The growth of 22.3% in advances in 2018 also contributed to increase in 2019 profit. The significantly higher growth in profitability in profitability of the Islamic banks is due to strong total asset growth in 2018 and also in 2019 and the higher spreads resulting from higher interest rates.

In 2019, the annualized increase in deposit was 12.3% while advances grew by 4.7% only, primarily due to the prevalence of the higher interest rate scenario. The availability of government paper and high returns resulted in banks focusing on earning healthy and secure returns. Further, the high interest cost resulted in lower offtake from businesses who considered borrowing mostly unfeasible.

2020 is expected to be a much difficult year due to the ongoing pandemic scenario. Interest rates have already witnessed a decline of 525 basic point and are expected to go down slow down.

The post pandemic situation is unpredictable but based on existing outlook, banking sector profitability is expected to be under pressure due to reduced offtake of advances under recessionary market conditions and cautions customer outlook, drop in fee income on distribution of wealth products due to volatility in capital market, increased credit losses / delinquencies as a consequence of lockdown. Fortunately, vaccine of COVID-19 is developed, hopefully economic situation will improve and resultantly banks outlook will improve further.

• Gross Advances of the banks increased to Rs. 8, 297 Bn in 2019 from Rs. 8,687 Bn in 2018 which is growth of 22.3%

• Deposit of the banks increased to Rs. 14,123 Bn in 2019 from Rs. 14,123 Bn in 2018 which is growth of 12.3%.

According to the report of the State Bank of Pakistan commercial banks dominate the fiscal system of Pakistan has a major role. The economic and financial history of the state significantly changed at the start of the 1970s along with the progress of public sector development of finance institutions and nationalization of domestic banks. But later, it developed crystal clear that the objective of socio-economic of the country could not be attained by nationalization.

By the near 1980s, the public sector of financial institutions both in non-bank and banking was liable for flagging excellence of assets, financial and economic inefficiency, and mounting threats of the downfall of national banking institutions. In the banking industry, the share of the public sector was more or less 90 percent in total assets of financial institutions in the 1990s, at that time local private banks did not exist which is why the rest 10 percent share belonged to foreign banks. More than these major parts existed for investments, advances, and deposits. In Pakistan, the whole structure of the financial system and banking experienced substantial variations after 1997. At the time of privatization of the public sector banks were started and banking and finance supervision was aligned with international trends. The ongoing process of merging, consolidation also brought noticeable changes in the structure, concentration, and ownership in the banking industry.

Ramlall (2009) claimed that it is an interesting case that since its beginning, the Pakistani banking system presents a completely diversified banking structure. A rapid look at the income after tax,

profit before tax dividing total assets of all banks which are operating during this time of study resulted from lower profitability. Banks are playing a vital role in the uplifting economy. Banks are the source of funds required to meet the financing needs of individuals and businessmen. Banks are also the custodian of surplus funds of individuals and businessmen. Banks have made it easy to perform financing transactions i.e. Funds Transfer, Bills Collections, Payments, etc. In Pakistani, the banking industry has gained exponential growth during the last 10 to 12 years and has enhanced its operation from major cities to small cities and increased its asset and liabilities base. State Bank of Pakistan has disclosed, the numbers of scheduled total banks operating in Pakistan are 34, and the number of branches stood at 13,039 at the end of June 2017.

### **1.4 FACTORS INFLUENCING BANK PROFITABILITY**

A stable banking and finance sector is capable to resist adverse shocks and contributes to the growth and steadiness of the economic and monetary system. Numerous factors both external and internal factors of the bank. Internal factors are those factors that can be managed by the banks' administration, decision-makers, and though objectives of the policy. Whereas external factors are the outside factors and these are not under the control of the bank's administration and decision-makers.

Internal determinants of a bank performance may include the location and size of bank branches, motivation, operational efficiency, marketing competencies, operation efficiency, strategy and quality, and management competencies but internal factors are not limited to these variables only and can be varied. If not impossible, it may be very difficult to assess all of these variables, as these variables implicitly or explicitly reflected in the performance of a bank especially commercial bank,, and can be retrieved from the balance sheet of a bank and also by analyzing profit and loss statement income statements of the corporations and organization which are the subject of the study. Resultantly, this can not be surprising that previous studies have used financial ratios to quantity internal determinants.

The internal factors i.e. size of the bank, expenses management, capital, risk management,, and decisions of the administration on balance sheets, profit/loss accounts,, etc impact the profitability and the performance of a bank directly, the the majority of the variables of these factors remained private and not publicized. Additional internal factors that are closely related to bank management are liquidity or credit is considered as banks' specific factors especially risk management. Like the

banking business, the need for risk management is important but inherent. Meager liquidity and inferior asset quality are the two main factors of bank's failures and in terms of liquidity and credit, these are signified as the key risk sources and attracted greater attention of researchers and economic experts to check its impact on bank performance and its profitability.

The macroeconomic milieu, that is inflation, interest rates, cyclical output. And those variables that denote market features that are the size of the industry, the concentration of the market, and the status of ownership. These external factors are represented in the institutional background and economic situations and affect the profitability of banks externally.

Staikouras & Wood (2011) concluded that external factors that impact profit and performance of a commercial bank are associated with the economic and legal environment of an institution which encompasses factors for example inflation, recession interest rates, market growth, regulations, the structure of the market and boom. Onuonga (2014) opined that the factors which are affected by the banks' administration decision and policy objective are called internal factors of bank success. Actions showed in variances in bank working results which includes the profit of the bank. The internal factor show the executive or administration policy of banks and decisions is made regarding the origin of the fund, liquidity management, expenses Information on bank-specific factors which are an internal factor and external factor that influences on performance and profitability of commercial bank may be attained and analyzed from their periodic accounts henceforth studies will emphasis on the size of the bank, liquidity, capital sufficiency, efficiency and credit risk the operation of a bank. Numerous factors have a positive and negative impact on bank performance. Some are internal factors or variables i.e. Advances, Investments, NPL, deposits, Non-Interest Income, Interest Income, Administrative Expenses and some are external factors i.e. Inflation, etc.

As mentioned by Zimmerman (1996), management decisions and policies especially about the concentration of portfolio of the loan was a significant factor influence the performance and profitability of a bank. Quality management is frequently considered a good attribute of bank performance by the researchers. Management quality is always assessed in terms of control and awareness of the senior officers, the policies of the bank, performance/profitability.

According to the work of Haslem (1969), most of the calculated income statement ratios and balance sheet were highly pertain to profitability in certain ratios of capital, wages, interest on a

loan received and interest paid on deposit paid and salaries. He describes complete guidelines for bank administration, from the management of the source of funds, management on expenses which are incurred, and lastly management of the utilization of these funds to earn income.

Wall (1985) concluded that funding management of the bank and its liability and asset management and to controls costs related to non-interest all these determinants have an important impact on record of profitability. So much research concluded that one major factor which significantly influences the profit of a bank is to manage the expenses. The performance and profit of a bank can be increased through the management of expenses of the banks by providing them an opportunity to control them.

The study of Bourke (1989) shows the expenses related to staff such as salary have the inverse effect on return on Assets. The work of Molyneux(1993) however highlighted a direct relationship between expenses incurred on staff and profit the banks which they earned. External factors which influence the profit and performance of a bank ae those factors which are not under the control and power of the bank and are not changed bank-specific policies and decision. Many external factors are comprised distinctly in the review examination of banks to separate their effect from that of its organization so the influence of previous on performance or profit can be increase visibly distinguished. But the usage of Gross Domestic Product increases which is also considered an external determinant of bank performance can not show comprehensively in the previous study as a variable. Hoggarth(1998) however concluded such as the comportment of real Gross Domestic Product was unsuccessful to clarify the larger changes in the profit of the banking industry or revenues in UnitedKindom than in another country. The conclusions of the authors were reinforced if the subject variable was not empirically significant in describing the profit of the bank, but it is commonly observed that the increased growth rate effect decrease probability of individual as well as it corporates nonpayment and easy accessibility to loan.

The impact of inflation may be important and undercuts the steadiness of a financial and banking structure and also the capability of the manager to regulate the affluence of banking and financial mediators. As noted by Revell(1979) the changes in bank performance and profit may be intensely clarified through the rate of inflation.

Ahmad Aref Almazari (2013) suggested that a resilient banking sector is capable of confronting the negative tremors and add to the growth and constancy of the monetary system and for the economy. The financial and banking industry is affected by various factors and determinants, such factors are external and internal 1 and have a straight impact on the function and profitability banking / financial system. The internal factors or determinants affecting bank performance are related to the management policies and decisions i.e. balance sheets, profit/loss account, capital, size of assets of a bank, expense/risk management. All these determinants directly affect the performance and profitability of the banking system because almost all of such factors are private and confidential. Many internal determinants are considered bank-specific like credit or liquidity and risk management these are closely related to the management of the bank. The need for management of risk in the financial / banking industry is derived and related to the banking business. Poor liquidity and lower quality of the asset, are two main causes of the failure of banks, and these are considered as major risk causes in the relation of credit and risk of liquidity and engrossed care of the scholars and experts to check their effects on the profit of bank and also their performance.

External determinants that affect the profit and performance of banks are characterized in the institutional background and economic circumstances. Macroeconomic milieu, that is inflation, rate of interest, cyclical output and, and the variables which represent physiognomies such as ownership status, industry size, and market concentration.

Athanasoglou et al. (2005) asserted that internal-factors which are controlled by the administration an organization or corporation and if the administration is efficiently managed and efficiently planned, it can add definitely to the performance of the organization. Major determinants that administration or executive emphasizes on is income diversification and likely operational cost management and to confirm that organizations attain maximum profits and its cost to be lower. The effectiveness of administration regarding cost for operation is measured by dividing total operating expenses with total assets. Its relation to the profit of the organization is negative. In this regard, the quality of management regulates operating cost and its impacts on the profit and performance of the organization.. adequacy of the capital is the major internal-factors from internal-factors that impact the performance of the organization.

As asserted by Dang(2011) the capital adequacy is defined based on CAR(capital adequacy ratio). CAR ratio illustrates the internal stability power of a bank to bear shocks at the time of crisis. Sangmi and Nazir (2010) also advocated that CAR(capital adequacy ratio) has a direct relation to the flexibility of the banks in disaster or recession. CAR(capital adequacy ratio) also has a positive influence on the profit and performance of banks by defining its growth to uncertain then profitable schemes.

# 1.5 COMPARATIVE ANALYSIS THE PERFORMANCE OF COMMERCIAL BANKS

The researchers of the impact of internal and external factors found Saudi Arabia which has a major growing banking sector in the world and economic markets. Major banks that are working in a competitive environment are maybe extra competent in the nearby future in the area. The banks in Saudi Arabia are enjoying steady development and steadiness during the past decades. The results of stress tests conducted in recent times also demonstrated that banks in Saudia are well-equipped and sound to survive any tremor or recession.

The banking industry in Jordan, besides, contributes a very important part in supporting the gross domestic product of Jordan the country. It is an engine to boost and support the economy of Jordan. In boosting financial improvements, efficient working of the banking industry has become the most significant part of the economy of Jordan. The efficiency, profitability to turn out to be one major of the tasks to strengthen banks and boost their positions in the market to bear the risk related to ingenuousness/globalization.

As described by Luboteni, G. (2013) in the framework of economic and financial institutions, commercial-banks contribute a significant role and also add an abundant impact on financial immovability, economic development. Ahmeti.S, Hoti. A, and Alshiqi, S. (2014) claimed that

Once there had been fast progress in the banking industry in Kosovo during 2007-2008, that was established a higher level of competition in a market. In the total number of ten commercial banks functioning in Kosovo's state, only two were local while eight of them were foreign. Kosovo's banking industry has gone through major changes from the beginning until today i.e. changes in technology, these change which was effected through the introduction of some bank in this area and these local as well as foreign. This increased race in the banking industry affect the progress of banks.

Considering the contribution of banks in the economic development of a country and take the example of Kosovo which is a country that has an economy that is not developed. It concluded,

this study would check the effect of internal-factors on the profit of the bank. Internal factors are those factors that affect the profit of a bank and can be controlled by the administration a bank. An example of internal-factors is Return on Asset which checks how many assets are returning in terms of profit during a period. This study also covers a comparison of data from 2010 to 2014.

### **1.6 COMMERCIAL BANKS IN PAKISTAN**

The numbers of banks and financial institutions are increasing day by day. Similarly, the banking habit of people is also an increasing trend. The single institution cannot satisfy all the services required by the customers. To fulfill the demand, any kind of bank emerged in the banking industry specializing in various economic function areas. There are different types of banks. Among them, the commercial bank is one. Commercial banks represent an important financial and economical intermediate since they work with major kinds of economic deficit/surplus components, they propose deposit account containing the characteristics of size/maturity required by extra units. They use these funds and provide a loan with maturity or revolving basis which is called assets for the bank to those individuals/organizations who are short of funds/liquidity. They also can calculate the creditworthiness of that organization/individual who is in deficit and apply for the loan. They do this activity so that they could take exposure to these individuals or organizations. The commercial bank has been a vital role in economic development. Banks are intermediaries, which mobilize funds through the prudential combination of the investment portfolio in advanced countries.

Banks are still to be realized as an essential mechanism of mobilizing interval saving through various banking schemes in the economy they can accumulate and collect the capital among another prerequisite. Commercial banks are a source of liquidity for industry/trade as well as other sectors, which contribute an important role for financial / economic development of a country. They support the formulation of investment through investing these funds in profitable areas. In almost of the country's banking facilities are concentrated in the urban and semi-urban area, they want to stay far from the rural area due to the lower rate of return or higher risk. But without it, another sector of the economy cannot be flourished.

A commercial bank is vital for financial and economic division, predominantly in growing economies in which the economic and capital sector is not strong and well established. Commercial Banks' performance/profit is vital due to the progress of any industry or sector of the country is

directly related to the progress of the entire economy. Therefore, the productive/proficient banking industry will be capable and efficiently managed to bear negative financial and economic losses.

Commercial banks contribute an important part to the economy and finance for a country. This present research aimed to check the performance/profit of the twenty-three commercial banks functioning for Pakistan in the period from 2013 - 2018. These are some internal-factors that are under the control of administration some external – factors which are also called environmental factors. Internal – factors are capital ratio, policies related to human resources, and risk. External – factors include inflation etc.

#### **1.7 INTERNAL / EXTERNAL FACTORS OF THE STUDY**

Profitability has become that a major task for commercial - banks faced to grow and improve their outlook of financial standing so that they could encounter some risk linked to globalization/world economy. The flourishing banking industry is also good to survive adverse surprises and also add to the constancy of an economic and financial - system. The causes and factors of profit of the banking industry are well observed/explored because this is significant to improve the basis of the fiscal system of the country as this is the way to make flexibility for volatility in the flow of capital. The performance/profit in commercial bank influenced through Internal –factors which can be influenced through the policy/decision/goals of administration by itself i.e. capital, the asset size of the bank, Non-Performing Loan and external – factors which influenced through external environment. Examples of external – factors are inflation, policy rate, Gross Domestic Product Rate, free trade, and structure of the financial system. Keeping in view this scenario the significance of the present study is to identify both internal – factors and external – factors and their impact on profit/performance of commercial – bank of Pakistan in particular.

To measure the performance/profit of banks, two main ratios i.e. Return on Assets and Return on Equity are widely used. Return on Asset shows how efficiently a bank is converting its deposit into assets to produce revenue. Return on Equity is profit from the income earned on each unit of investment through equity/capital in a bank. The difficulty in Return on Asset is because it ignores items in the balance sheet from the gross asset. Take an example, it excludes assets obtained through lease while calculating the gross value of assets. Which can ultimately make a positive bias at which Return on Asset is overvalued while calculating the performance of a bank.

Golin(2001) and Rose et al.(2005) claimed that Return on Asset is the major tool to measure the performance/profit in today's banking study. Haron(2004), Hasan-et-al(2003), Bashir(2001), Demirguc-Kunt (1998), Naceur(2003), Alkassim(2005), and Alrashdan(2002), all used Return on Asset as a tool to measure the performance of a bank.

Non-Performing Loans had a significant negative effect. He Analyzed the effect of Non-Performing Loans on profitability of ten conventional banks listed on the Indonesia Stock Exchange (BEI-IDX). This study uses secondary panel data for 2015-2019 and NPL values from ten conventional banks listed on the BEI-IDX during the 2020 observation period. The research approach is quantitative descriptive with data analysis methods, namely, linear regression. (Tangngisalu, 2020)

Advances and Investment have a positive impact on the profitability and performance of the banks. (Syafri ,2012)

GDP growth positively affects the performance and profitability of the bank industry. (Kiganda ,2014)

Macro economic (external) factors have significant effect on banks' performance and profitability in Nigeria. whereas return on assets was dependent variable (Adeusi. OS, Kolapo.TF and Aluko. OA, 2014).

Higher profitability of the banks during the mentioned period was related to a greater percentage of advances, an increase in the customers' deposits, and better efficiency was seen. He examined the determinants that affect the profitability and performance of Spanish banks during the period 1999 to 2009. (In Spain, Ponce ,2012)

Profitability of the banks increases as the asset (Advances/Investments) and non-interest income increase. Turkey's Banks data from 2002 to 2010. (Dege Alperr, 2011)

GDP Growth rate, Inflation and Interest rate have significant impact on the profitability of the banks (ROA). The researcher employed panel data from 2004 to 2011 in the study. Sixteen banks containing eight local (domestic) and eight overseas (foreign) banks. (Jamal and Hamidi, 2012).

Greater share of deposits incline to be more profitable and show better performance of the banks. They employed panel data set on different big and small Chinese banks from 1997 to 2004. (Garcia-Herrero et al., 2009).

Internal factors (Loan, deposit, size, NPL (provisioning), capital have significant impact on bank performance/profitability measured through ROA, ROE and NIM. They have used un-balanced panel data of top 35 European banks from 2009 to 2013 (Menicucci E, Paolucci G, 2016).

The determinants and parameters applied in the study are as under:

- Advances are one of the most important parts of the bank's asset side. They are the major source of income for the bank and liquidity for businesses and individuals. Banks lend money to individuals and businesses in the form of agriculture loans, consumer loans, Commercial Loan, and Lease. These all are summed under the component of Advances.
- Investment is also one of the major components of the assets side of the bank and a source of income for the banks. Banks invest in Treasury Bills, Bonds, Govt. Securities, and Shares to earn income. If they made more investments, more income will be generated and will have a positive impact on bank performance.
- Non-Performing Loan is default loans which debtors failed to repay. Every bank has a
  preference that this part i.e. NPL should be minimum. Regulators directed banks to create
  provisioning against these loans from the profit of the bank. So NPL has directly decreased
  the performance/profitability of the ban+ks.
- Deposits are the amount of money which customers of the banks deposited in the bank and they have claim over it. Therefore, deposits are written on the liabilities side of the bank. Deposits are a lifeblood for the bank because they have to lend this money to earn profit and also to pay interest to depositors over saving and fixed deposit. If banks have sufficient deposits then they can lend without worrying. Deposits are in categories of current deposit, saving a deposit, and fixed deposit. Nowadays, Banks prefer to increase the volume of current account deposits because banks don't pay interest on it.
- Borrowing is the number of liabilities of the bank which they borrow from the central bank, International/local bank, or from any other Financial Institution e.g. IFC. Bank has to pay back this loan with interest. These are costly but sometimes, there is no choice but to borrow an amount like financing some projects outside the country, bank prefer to borrow it from some International Financial Institution. Sometimes, the regulator finances banks to promote the specific sector of the country.
- Inflation is the general upsurge in prices and the resultant reduction in the value of money. There are many factors of inflation. Inflation is the result of injecting too much money in the market by the government by a purchase of bonds or because of the loans issued by commercial banks. Another cause of inflation may be a substantial increase in the demand

for surplus money in the market, though the supply is lagging. Inflation is an important external factor that influences bank performance which is intensively discussed in the study. Specificalinflation influences the behavior of the companies while setting the prices. As described by Driver (2007) and Windram (2009) if a company expects over-all inflation can be greater in the upcoming period, they can consider surging the prices keeping the demand of their output intact. In this state, upon the condition that expected inflation will be equal to actual inflation, there will be no decrease in business activities and no adverse influence on banks' performance.

Inflation has no negative influence on the banking industry and the performance of banks and its spillover effect is very detrimental to the overall economy of the state. Inflation influences the bank exchange rate regime, purchasing power, and opportunity cost of holding currency in the future by worsening loan policy, disrupting business plans, and the equity holding performance of banks. Though other arguments claim that inflation can lead to escalating the performance of the bank as long as the banks can be able to anticipate future inflation and regulate interest rate to produce higher revenue than cost/price which leads to greater profit and performance as a result of adjusting the rate of interest.

- ROA (Return on Asset) means net profit after tax over the total asset. It means, how much profit is produced against a single rupee of the asset. ROA (Return on Asset) is a ratio that is derived by dividing the net income over total assets. According to the studies of Naceur (2003) and Alkassim (2005), ROA (Return on Asset) has been used for the measurement of profitability and performance of the banks. ROA measures the revenue earned by a single dollar of assets and reveals how effectively the management of the bank is using the bank's real investments and other resources to produce more money and generate profits.
- ROE (Return on equity) means net profit after tax over shareholders' Equity. Fraker (2006) described, return on equity (ROE) is the ratio of net income to total equity it measures on one rupee of shareholder equity, how much profit is earned. ROE (Return on equity) measures the ratios of shareholders' equity i.e. return on the ownership interest of the common stock owners. It also measures the company's proficiency in generating profits from every unit of stockholders' equity, also known as net assets and/or assets minus liabilities. ROE shows how soundly a corporation is using assets or funds to generate profits. ROEs between 15% and 20% are considered desirable.

• Earnings per share (EPS) = (Net Profit-Preferred Dividend) / Weighted Average Share Outstanding.

### **1.8 PROBLEM STATEMENT**

The study aimed to find out the impact of the internal and external factors on banks' performance in Pakistan. In previous studies, specific factors that influence the bank's performance and profitability have been identified, analyzed, and discussed. In the present research, both internal and external factors that influence commercial bank's performance in Pakistan were analyzed.

### **1.9 RESEARCH GAP**

The banking sector plays an important role in the economy of the state. It is the backbone of the economy. The Financial and economic resources of the state are allocated through banks. Furthermore, the banking industry acts as the heart of the economy of a country through which money is injected into the financial market. Thus, continuous performance evaluation of the banks is needed to measure the profitability of the banking sector. The existing literature on the banks' performance considers CAMEL (capital adequacy, Asset quality, Management, Earnings, Liquidity) model a useful tool for evaluating the performance and profitability of the banks and examining the soundness of banks. This model is being used by Regulators. Regulators have engorged bank administration by utilizing the CAMEL model to assess and evaluate the performance of the banks and the financial wellness of the bank's activities. The Model CAMEL was first developed in 1979 and is recommended by UFIRS, the US Federal Reserve, and the Uniform Financial Institutions Rating System. State Bank of Pakistan is also using the CAMEL Model to assess and evaluate the performance of the banks and evaluate the performance of the banks and performance of the banks and is recommended by UFIRS, the US Federal Reserve, and the Uniform Financial Institutions Rating System. State Bank of Pakistan is also using the CAMEL Model to assess and evaluate the performance of the banks and performance by UFIRS, the US Federal Reserve, and the Uniform Financial Institutions Rating System. State Bank of Pakistan is also using the CAMEL Model to assess and evaluate the performance of the banks operating in Pakistan.

CAMEL Model only examine bank performance through specific ratios but the performance of the banks is also affected by some major internal factors like e.g. Advances, Investments, deposits, Borrowings and external factors like prevailing Inflation Rate in the country

In this research, the Performance of banks was evaluated by both internal and external factors and examined their effects on bank performance. Performance parameters were ROE, ROA, and EPS.

# **1.10 OBJECTIVITY OF STUDY**

This study aimed to analyze the impact of Internal and External factors on bank performance of nine big commercial banks e.g. HBL, United Bank Limited, MCB Bank Limited, National Bank of Pakistan, Allied Bank Limited, Bank Alfalah Limited, Meezan Bank Limited, Bank Al-Habib and The Bank of Punjab. Data was collected from the period from 2013-2018. This Research is helpful both for stakeholders of banks and students of Finance to further peruse this research in other industries as well.

## **1.11 RESEARCH QUESTION**

For the present study following research questions were developed:

- 1. What is the impact of Advances on Bank Performance?
- 2. What is the impact of Investments on Bank Performance?
- 3. What is the impact of NPLs on Bank Performance?
- 4. What is the impact of Deposit on Bank Performance?
- 5. What is the impact of Borrowing on Bank Performance?
- 6. What is the impact of Inflation on Bank Performance?
- 7. What is the impact of Gross Domestic Product on Bank Performance?
- 8. What is the impact of Policy Rate on Bank Performance?

## **1.12 SIGNIFICANCE OF STUDY**

It is well known that banking is playing an important role in influencing economic activity and regional growth (Andersen & Tarp, 2003). A more efficient banking system could reduce the waste of banks' resources in the intermediation process (Pagano, 1993; Lucchetti et al., 2001) and accelerate the economic activities. To evaluate overall performance and to observe the financial condition of the organizations is essential to the owners, managers, potential investors, depositors, and of course, the regulators. The present study was conducted to analyze how internal and external factors affect the performance of the bank concerning its profitability. It emphasized different indicators of performance that were specifically important for better performance and soundness of the banking industry.

This research provided insight to investors and shareholders about the main factors that affect the performance of the bank and the impact of some external factors on the profitability and performance of commercial banks. It enhanced the knowledge of investors beyond the archetypal information like financial statements and disclosure which were made by banks in their annual statements. Based on information stockholders will take a more valuable decision to invest in a certain commercial bank.

The findings of the present study will contribute and add more information to the existing literature about bank performance and the factors that affect the performance and profitability of banks as well as it will also bridge the knowledge gap presently exists related to bank performance measures available.

Additionally, it will be helpful for the bank management to formulate a more practical strategy for subsistence and long term development of the organization. It will also prove beneficial for the reader to know the specifics of the models of performance evaluation 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.

The following chapter will present an in-depth analysis of the existing theoretical and empirical literature on the importance of the banking system, profitability, Internal and external factors that influence banks' profitability, Impact of Advances, Investments, NPL, Deposit, Non-Interest Income, Interest Income, Administrative Expense and some are external factors i.e. Inflation on banks' performance. The parameters of banks' performance were ROA (Return on Asset), ROE (Return on equity), and EPS (Earnings per share).

# **CHAPTER 2 LITERATURE REVIEW**

# **2.1 INTRODUCTION**

This chapter deals with the empirical and theoretical review of the literature. The theoretical literature review focuses on the theories done by scholars. In this chapter factors affecting the performance of the banks are reviewed and discussed. The empirical review involves studies done by researchers both locally and globally. Detailed discussions of empirical studies done previously about factors that affect bank performance or profitability are given in this chapter. Though most of the studies in existing literature examine developed economies but some studies examining developing economies such as Pakistan's economy is also discussed. A comparative analysis is also given which highlights the effects of factors on bank performance.

# 2.2 IMPORTANCE OF BANKING SYSTEM FOR ECONOMY

Banks are important units of the economy of the state as they play a vital role in emerging, encouraging, and maintaining the development in financial and economic segments. They relocate the resources and funds from surplus to the deficit. Thus, performance is greatly desirable for the bank industry as well as any other enterprise that is why it is significant to discern the main factors that affect the bank performance. Banks speed-up the development process of the economy of a country through the services they perform. Therefore, banks need to flourish too to provide facilitation to the investors and vice versa. It is because prosperity will stimulate them not to leave the market by maintaining economic equilibrium and healthy competition. As described by Gutu (2015) it is highly significant to identify the factors that affect the performance of the bank because banks are the most significant financial arbitrators that play an important role in bridging investments and savings in many countries of the world.

In a study, Koivu (2002) found the efficacy of the banking industry speed up economic growth and development in the transition economies like Pakistan. Drakos (2002) also examined the relationships between economic development and the financial sector in 21 transition economies. The study showed that profitability in the banking sector can accelerate the economy while imperfect competition can lower the economic progression and deepen the business cycles. Levine et al. (2000) and Beck et al. (2000) assessed the role of financial expansion in motivating economic development. The study found that greater banking industry development implies greater economic development and entire factor productivity development.

According to the study of Leahy et al. (2001), which was conducted on Organization for economic cooperation and development (OECD) countries, the data showed that financial institutions development and the stock market has a very robust relation in economic development and financial expansion. In a study on five developed economies, Arestis et al. (2001) applied a time series model to show that both the stock market development and banking sector could denote subsequent economic development. As examined by Spiegel (2001) the correlation of fiscal growth and financial development indicators showed that financial development indicators (FDIs) are associated with complete productivity growth and physical and human capital accretion.

In the view of Lipunga (2014) profitability or performance of banks is vital because the reliability of an enterprise is closely linked with the reliability of the economy of the state as a whole. The financial power of the bank industry is un-debatably linked to its performance and profitability. So, it is needed for the bank's leadership and management to gain profits and returns on a constant basis as this will ensure banks' profitability and existence. According to Adeusi, Kolapo & Aluko (2014) achieving the goal of profitability is most important for a bank as the performance and profitability and performance of the banking sector is central as the prosperity of an enterprise is closely associated with the soundness of the total economy f a country in general, as claimed by Alkhazaleh & Almsafir (2014).

Therefore, according to Ally (2014), a productive and proficient banking industry is competent and better employed to endure adverse economic shocks. As verified by Calderon and Liu (2003) there is a correlation between financial development and economic growth. The data was collected from 109 economies from the period from 1960-1994. The study shows that the influence of economic growth on total financial development has become significant in advanced countries for decades. Thus, they favor the policy of supply-leading economic and financial development.

According to the study conducted by Hshin-Yu Liang and Alan Reichert (2006), the findings revealed a causal relationship between financial development and economic growth and in both developing and developed countries of the world. They applied Odedokun and Granger causality model to find out the results.

They claimed that the production task of economic development seems to be more edifying. According to the model they used in their research, there is a constant indication of a robust supply–leading relationship between the development of the banking industry and economic or financial output. Furthermore, the study of Caporale M. et al (2009) also highlighted the relationship between economic growth and financial development in 10 European-union economies for a period from 1994-2007. The study revealed that in these countries the stocks and money markets were at the infantile stage and they contribute very limited economic and financial growth and they also lack financial debts. Additionally, the result of the research specifies a strong relationship between economic growth and financial development but not vice versa.

Alfara (2012) conducted a study in Palestine for the period of 1995 to 2011. In this study, he discussed the importance of the bank industry in financing and supporting economic development in Palestine. The study assumed that economic growth was influenced by some economic indicators like banking credits, population size, the number of bank branches, deposits, and the interest rate on debt. The study shows that bank credits have a positive impact on GDP but in Palestine, this correlation is not up to the level to ensure the desired economic development.

Owdeh (2012) conducted a study in neighboring country Lebanon, inferred the CDR (causality directional relationship) between bank sector growth and economic development from the period of 1992 to 2011. The results were derived by using the Granger causality test. The study revealed one-way causality in succession from economic development to the bank sector, in reverse banks acknowledged to the economic efficiency and resident private sector.

Likewise in Jordan, Al-Khatib and Al-Saffar (2013) explored through their study a relationship between economic and financial growth and banking development for the period of 2001 to 2012. The study determined that economic and financial growth and banking sector development has a robust demand-leading correlation. The study also claimed that bank sector development is highly affected by economic growth. In a study conducted by Petkovski and Kjosevski (2014) factors affecting banks, the performance was examined in South Eastern and Central European economies. They analyze the influence of the developing banking sector on the economic growth of the countries. As independent variables, they applied the ratio of quasi money (RQM), banking credits, and interest rate. As the proxy variable, they applied GDP (gross domestic product). The study concluded that there was a relationship between banking credits, interest margin, and RQM on economic development and GDP growth.

### 2.3 BANKING SYSTEM IN PAKISTAN

In Pakistan, the banking industry is playing an important role in the growth and development of the economy. The development of the bank sector is the result of the attentive supervision of SBP (State Bank of Pakistan). The most important parameters of the bank industry of Pakistan are shares, investment in securities, advances, deposits, and weighted average rates on advances. The performance and profitability of banks are also measured through these indicators.

#### 2.4 COMMERCIAL BANKING ACTIVITIES

Ongore (2013) viewed that in the economic and financial resource allocation and development process of countries. Otuori (2013) added that commercial banks subsidize the economic development of a country by providing reserves for investors for borrowing as well as for financial expansion of the economy of the country. Athanasoglou et al. (2006) researched the financial structure of the SEE (South Eastern European) economies. He claimed that the economic and financial structure of SEE (South Eastern European) states is branded by the leading role of the bank industry, with the capital-market for long-term investment being illiquid contrary to that in the infantile economies' non-bank economic arbitrators, such as private pension funds and life insurance companies are still at an emergent phase of the development process.

Prasad and Roy (2007) opined that financial commercial banks rendered great financial service \]6through its activities and play an aiding role in promoting financial development in emergent states. Agri-Trade, 2011 report of South Pacific countries revealed that of the total population of the countries, more than half of the population is involved in subsistence farming in traditional agriculture. The population in these countries is most often faced with a critical shortage of capital, an under-developed transport system, and lacks the initiative for enterprise development. Duncan, Sandy, & Malcolm (1999) identified the other causes of the lack of investment of the countries were specific socio-cultural issues and the economic policies of the government that increase the cost and risks of investment. Commercial banks act as an intermediary body in overcoming these difficulties and promoting e conomic and financial development. They create support in the capital formation of the economy and encourage people to borrow and save capital by introducing credit schemes. They mobilize investments for capital formation and activate indolent savings from the rich lot of the population and channeling them into fruitful investments.

According to the study conducted by Rose (1986), investments promote capital formation, but in the same way, the principal element of the cost of credits is based on the law of scarceness, which grasps that when the one is rare and scarce, they become more expensive to obtain. These commercial banks also finance the agricultural and industrial sectors by providing short-term, medium-term, and long-term loans and advances. The banking sector facilitates the economy of a country by sponsoring the internal as well as external business and trade by their overdraft amenities and dispensing drafts by giving advances to wholesalers and retailers to stock goods.

Similarly, Crockett (2001) asserted that the commercial banks provide a lead in following the instructions of the economic policy of the state or central bank to make them favorable for stabilizing the macro-economic environment in the banking sector. In developing countries, commercial banks also support consumers by providing them advance loans with low profit or interest for the procurement of consumable items, in this way they may raise the living standards and economic status of the people by providing them loans and advances for consumptive activities.

The study of Mishkin (2007) also highlighted the importance of commercial banking in providing entrepreneurial activities and employment generating activities and opportunities in the state by issuing advances to productive segments of the economy. The significance of the bank industry in economic growth has made access to the services and financial resources a significant issue discussed and analyzed by economic development and other aid agencies around the world and in the Pacific countries. Additionally, access to financial institutions is necessary for financial development. This not only reduce the poverty but also boosts shares the wealth. Access to financial services has become an important part of continuous development.

### 2.5 PROFITABILITY IN COMMERCIAL BANKING

The objective of a bank is to spawn profits which will be enough to shield their disbursements. Besides, like any other enterprise, banks meant for profit. The major cause of income originates from interest-rate bank charge-on-loans or advances. Profitability and performance are the major goalmouths of all enterprises or business endeavors, which is significant for sustainability and progress in the long-run. That is why, it is highly imperative to assess the performance and profitability of an enterprise in terms of former, current,, and future performance indicators to calculate, plan,, and avoid undesirable outcomes. The indicators that determine viability or performance are revenue and disbursement which are are considerably revealed in financial testimonials per annum.

According to Lipunga (2014), banks' viability is significant since the sustainability of an enterprise is closely interrelated to the sustainability of the total economy of the state. The economic power of a banking institute is indisputably connected to its profitability, therefore, the most significant requirement of the management and leadership of any bank is to generate revenues constantly as it will warranty the bank's continuous survival. Adeusi, Kolapo & Aluko (2014) also described that reaching profitability goalmouth is vital for the survival and sustainability of any bank institution.

Alkhazaleh & Almsafir (2014) claimed that the profitability and performance of the bank industry are vital as the welfare of this sector is closely linked with the soundness of the entire economy of the state in general. Hence, according to Ally (2014), a productive and proficient banking industry is better placed and capable of enduring adverse economic shockwaves.

In a study conducted by Gul et al. (2011), they inspected the profitability and performance of fifteen commercial banks of Pakistan. They applied macro-economic and bank-specific factors between the periods of 2005 to 2009. They used POLS (Pooled Ordinary Least Squares) to assess the performance and profitability of banks. The findings of their research revealed that the internal factors i.e. bank size, advances and loans, deposits and capital, and external factors i.e. GDP, stock market capitalization, and inflation have a great effect on the profitability of banks.

Davydenko (2011) conducted a study on the Ukrainian banking industry on the profitability of banks by employing both internal as well as external factors that play an important role in outlining bank performance and profitability. He used panel data in utilizing the time-frame of 2005 to 2009.

According to the results of his study, the banking sector of Ukraine underwent a big shock on the quality of advances and is not capable of reconstructing their revenues based on the rising flow of

credits till the end. According to the study of Davidenko, credit risk, deposits, liquidity, inflation, and overseas ownership all these factors have an undesirable impacts on profitability and performance of the bank which is reverted separately.

Not only did he found confrontational factors but progressive factors like bank size, capital, and exchange rate depreciation and concentration rate were also found by Davydenko (2011). Singh and Chaudhary (2009) in another study examined the determinants of profitability in Indian's banking industry from Private, Public, and Foreign, three different perspective banks. The findings of the study were that profitability and performance of the Indian banking industry have considerably augmented in past few years. The breeds of macro-economic factors as per capita income, exports, and foreign exchange reserves, all have a great impact on performance and profitability.

In Indonesia, Anwar and Herwanay (2006) conducted a study on the theme of banks' performance and profitability of the banks managed by the provincial government and non-foreign exchange private banks of Indonesia from 1993 to 2000. In this study the researcher employed as dependent variables ROA and ROE to outline the performance and profitability of the bank industry of Indonesia. The main finding revealed Loans to Deposits Ratio and Total Assets affected the profitability of the Indonesian banking industry positively.

Yang (2009) conducted a study on the Canadian banking sector; he analyzed 240 branches a vast Canadian bank in Toronto and applied DEA (Data Envelopment Analysis) approach. The study revealed the average proficiency-score of the bank was 0.89. It denotes that the bank's branches could spend almost 11 percent lesser expenses and labor to yield their productions. The researcher illustrated that for measuring performance it is very significant to assess the interrelationship of inputs with outputs otherwise sensitivity-analysis on the influence of counting and discounting variables needs to be organized.

In another research in Greece conducted by Tsolas (2010), the total performance of the branches of big commercial banks in terms of efficacy, effectiveness, and profitability was tested. They applied a two-staged DEA (Data Envelopment Analysis), the model. The findings show that the general efficiency level is structured mainly by proficiency level of profitability which shows a positive relationship between complete efficiency and profitability efficacy.

In another study conducted by Rehman and Raoof (2010), a comparison of total efficiency score of government, private and foreign banks of Pakistan for the period of 1998- 2007 was done. It is essential to highlight the fact that the economy of Pakistan was in transition during this period. Because of privatization policy and financial reforms, a good sum of private banks appeared in the last few years a good number of public banks was considerably dropped. The results of the study show that the performance of the banking sector in Pakistan during the period was not consistent. During the year 1998, the total efficiency score being 0.81 was very well. This was just below the efficiency score of the world. But in 1999 and 2001 efficiency score was far below in comparison with the world efficacy standard.

During the residual period, the total efficacy score of Pakistani banks remained varying in comparison with the world score. With two exceptions in 2004 the result was 0.62 and in 2005 was 0.82. It is also argued by Rehman and Raoof (2010) that privatization policy and financial reforms do not necessarily have a positive influence on profitability and performance always. The influence of government policies and government policymakers on the performance of the bank industry was unsatisfactory.

Tanko (2011) employed efficiency by using the non-parametric method of DEA (Data Envelopment Analysis). The researcher calculated productivity growth by using MPI (Malmquist Productivity Index) in Nigerian commercial banks for more than five years.

#### 2.6 DETERMINANTS OF BANK EFFICIENCY

(TANGNGISALU, 2020) This study seeks to analyze the effect of Non-Performing Loans on Return on Assets on ten conventional banks listed on the Indonesia Stock Exchange (BEI-IDX). This study uses secondary panel data for 2015-2019 and NPL values from ten conventional banks listed on the BEI-IDX during the 2020 observation period. The research approach is quantitative descriptive with data analysis methods, namely, linear regression. The testing phase of this study includes: transform value, F-test, T-test and hypothesis test with significancy level sig < 0.05. The results of this study reveal that Non-Performing Loans had a significant negative effect (t =

-2,637 ) (0.011 <0.0) on Return on Assets R2 value is 0.128 or 12.8%. It has a significant effect on variables, calling efforts by banks, governments, and authorities monetary of related institutions to maintain the stability of finance. The reduction of Non-Performing Loan impacts on assets and

capital adequacy ratio, besides, the normal NPL will control the stability of finance. If a balance is created either in the form of values or amounts of the variables, the reduction in

Non-Performing Loans will be controlled. The study of Delis and Papanikolaou (2009) inspected the determinants and factors that affect bank performance and profitability. The researchers explored the bank industry of almost all model economies displays a gradual development in terms of their efficacy levels. The model they employed demonstrates some factors and determinants i.e. capital, industry concentration, investment environment, and bank size all these determinants have a positive effect on the bank's performance and profitability.

In Greece, Kosmidou (2008) scrutinized the factors affecting the performance of banks in Greece for the period of EU (European Union) financial integration from 1990 to 2002. He applied an instable pooled time series data-set on twenty-three Greek banks. He employed ROAA (ratio of return on average assets) to quantify bank performance and profitability. He categorized the factors affecting bank performance into internal as Well as external factors affecting banks' performance. The internal determinants or factors encompassed the ROE (ratio of equity) to total assets, total cost-to-income ratio, the ratio of loan-loss-reserves to gross-loans and the banks' to total assets, and the ratio of banks' loans to the customer and short-term funding. The external factors encompassed GDP, the growth of cash supply, inflation rate, the ratio of total assets to GDP and concentration, and the ratio of stock-market capitalization to the total assets of the banks. The findings revealed that ROAA (ratio of return on average assets) was linked with a lower cost to income ratios and also with well-capitalized banks. The findings also specified that the growth rate of GDP and the influence of size on bank performance has a positive effect, however, the inflation-rate has a substantial and negative influence on the performance of the banks.

### 2.7 INTERNAL AND EXTERNAL FACTORS

The factors affecting banks' performance and profitability are generally classified into internal (managerial) factors and external (environmental) factors or determinants. The existing literature is mostly based on the researches that are conducted in specific countries. Some of the instances of Panel countries are also illustrated. These studies were discussed to review the determinants of bank performance and profitability. Generally, these research works propose that the factors or determinants of bank performance and profitability can be categorized into two broad categories,

- 1. Internal factors that are managerial
- 2. External environmental factors

The studies (also discussed in the literature review) specified the internal and external determinants as independent variables and specified ROA (return on asset), ROE (return on equity), ROCE (return on capital employed), and NIM (net interest margin) as the dependent variables. In their study on 18 countries of Europe, Molyneux and Thornton (1992) inspected the factors affecting the performance and profitability of the bank industry. They procured data from eighteen European countries for the time of 1986-1989. The findings of the study revealed a substantial positive relationship between ROE and the level of interest rates.

Some studies reflected satisfaction with services provided by banks as the main determining factor of bank profitability. In another study by Jham and Khan (2008), it was revealed that espousal of satisfaction can lead to the better performance of the bank as one of the variables of bank profitability. Because customers' satisfaction is also closely associated with the better performance of the bank industry. The study of Wum et al. (2007) on the Chinese commercial banks, explored the effect of other determinants like economic development arbitrated by FIR (financial interrelation ratio), capitalization and size and branches of the banks, and business alignment measured by the proportion of non-interest income, the level of monetization measured by M2/GDP and GDP per capita. The findings of the study reflected that a higher level of financial development was associated with better ROA performance for banks. The findings of the study also indicated a positive effect of GDP (per-capita) on banks' performance. Though, size and business orientation show a negative impact on the ROA of banks.

#### 2.7.1 INTERNAL FACTORS

Internal factors that affect bank performance can be defined as the determinants that are affected by the bank management, its objectives, decisions, and policy of the bank. Zimmerman (1996) in his study mentioned that decisions made by the management of the bank especially about loan portfolio concentration, these were the leading factors affecting the performance of the bank. Management has a great effect on the policies, objectives, decisions, and the actions taken in operating banks affect the performance and profitability of the bank. In Pakistan, SBP (State Bank of Pakistan) controls the banking industry and supervises activities of local, foreign, public, and private banks that operate in Pakistan. State Bank of Pakistan has promulgated the CAMEL (capital adequacy, Asset quality, Management, Earnings, Liquidity) model as a policy structure and entails banks to report various phases of their operational and financial position. State Bank of Pakistan uses tenets of these indicators in making decisions and policy framework for the banking industry of Pakistan. In various studies i.e. Bodla and Verma (2006), Gupta (2008), Ishaq et al. (2016), and Sibal, Ongore, and Kusa (2013) applied the CAMEL framework to evaluate the performance of banks in Bahrain, India, Pakistan, and Venezuela. CAMEL indicators are;

#### 2.7.2 CAR (CAPITAL ADEQUACY RATIO)

As explained by Bodla and Verma (2006) CAR (capital-adequacy-ratio) is connected to the capital side and the liability of the balance sheet of the bank. It is derived by dispensing the total investments of banks with entire assets of banks. The resulted ratio is helpful for the analysts in analyzing the level up-to which banks can engross a certain level of indemnities before going to bankrupt. Banks need to ensure a fixed-level of CAR (capital-adequacy-ratio). This least CAR level aids as a shield to creditors and customers of the banks. It is a sign of the efficiency and stability of an economic or financial system of banks. The higher the CAR level the better it would indicate the stability of banks.

In a study on CAR Aktas, et al. (2015) recommended that CAR averts banks from going bankrupt which increases depositors' and customers' confidence level. They emphasize further that least Basle-Capital-Accord required that central or state banks should make it obligatory for banks to certify the at-least minimum level of CAR. The minimum capital-adequacy-ratios requirement for tier-1 capital is 4 percent and more whereas for tier-2 capital it is 8 percent or more.

#### 2.7.3 ASSET QUALITY

A study was conducted by Ongore and Kusa (2013) on asset quality, in which they emphasized that the banks should assess the asset-quality (advances, currency, and investments level) as it designates the credit-risk of banks. An efficient administration of asset-quality helps the banking sector in directing and observing credit risks, which paves way for the higher credit ratings of banks.

Ahamed (2017) advocated that the total asset-quality of any bank is associated with the valuation of money level and the risks associated with the resources of banks i.e. investments and advances. The quality of assets held in reserve by the banks is the main concern for the policy-makers in decision making. An assessment of the asset quality of banks recommends the size and level of credit risk confronted by the banks concerning the levels of processes and procedures.

Akhtar (2016) and Ahmad (2017) emphasized that an assessment of asset-quality is associated with the assessment of the suitability of grants for loans or advances and lease the losses. Different kinds of risks are disburse by banks, which impact the value of the bank's assets or the assets of any other organization. These risks include reputation, market, operating, strategic and compliance risks but these are not limited to them only. Bodla and Verma (2006) also conducted a study on asset quality and opined that asset-quality can be measured by allotting NPL (non-performing-loans) with total borrowing and advances of the banks.

#### **2.7.4 MANAGEMENT EFFICIENCY**

On Management Efficiency, Gupta and Sibal (2008) piloted a study the findings of the study revealed that management efficacy is the degree to which banks produce revenues infraction to the total-assets of a bank. It is an uninterrupted parameter of administration or capacity of the directors. Management efficiency can be calculated by dividing the total earnings by the total assets of the banks. It is a fast and easy way of assessing banks' capacity to spend the assets of the banks for producing incomes.

If banks apply the strict policy of price-control then it would be capable of producing a higher level of efficacy ratio. Though, there are likelihoods that revenues in the analogous period are not higher. Due to the difference in the practices of banks' management, a comparative analysis of the bank's performance with identical situations is more evocative. Generally, from the perspective of efficacy ratio, in using organizational assets management's higher efficiency is required, the higher the return-on-assets, the higher will be total performance and profitability of the bank.

### 2.7.5 EARNING QUALITY

Discussing the factors o the CAMEL model, Ongore and Kusa (2013) featured 'earning quality' which is another element of the CAMEL model. They advocated that earnings quality validates the competence of banks. The level of earning quality is an element that is obtained by banks

regularly as it can increase and sustain the future earnings of a bank. It can be measured by dividing the total income of banks and any other organization by the overall equity of a bank or other organization.

Kapan and Minoiu (2016) recommended that the earning quality of a bank is a measure to test the performance and profitability of the bank, growth level, and sustainability of a bank's future earning capacity. Banks brand all possible efforts to ensure protected and secure retributions so that they may invest and finance their actions for their sustainability. It is the most important measure of the performance and profitability of a bank. It also helps banks and other organizations in achieving their ultimate goals and disburse revenues to the bank and profits to the investors of the banks.

Gupta and Sibal (2008) proposed that earning quality helps banks in better performing financial activities like disbursing dividends, making diversification, ensuring a suitable level of capital, and sustaining a competitive position in the marketplace.

#### 2.7.6 Liquidity

Suresh and Bardastani (2016) elucidated another element of CAMEL that is liquidity. They submitted that it is a degree to which banks can transform their assets into currency. The level of liquidity will be higher if the level of liquid resources of a bank will be higher. It is related to the short-term capacity of banks in reimbursing their obligations. Banks' liquidity is measured by apportioning its currency and other liquid assets with current liabilities and short-term borrowings.

Suresh and Bardastani (2016) further elaborated the element and advised that the risk of liquidity of banks are concerned with banks' ability to accomplish challenges or come across the surprising funds that depositors can claim at any time. A solvent, strong, and liquid bank leads to total affluence for the banking industry as well as for the stockholders of the banks. If the banks are not able to fulfill makeshift liquidity they may face a predicament and can also damage the overall appearance of the banks. Hence, banks always try to ensure that they maintain a suitable liquidity position in the market.

Lukorito, Muturi & Nyangau (2014) suggested that liquidity should be more evaluated and its effects should more be studied. Yet Ongore & Kusa, (2013) had reverse discoveries, the findings of their study inferred that liquidity has an insignificant influence on the financial performance of

the banks. Liquidity deals with the banks' capability to tailor short-term expenditures as well as present liabilities. The empirical literature suggested if it is found to be higher it means the banks have a chance cost to use its excessive funds for savings. Income-diversification was an internal determinant that was not employed or captured by Ongore & Kusa (2013). The findings of their study suggested that banks can use surplus funds to finance and consequently should not depend too much on the mark-up or interest income only.

### **2.7 EXTERNAL FACTORS**

External factors affecting bank profitability and performance are considered environmental factors or outside events that affect bank performance and that are not affected by specific banks' objectives, decisions, and policies. Numerous external factors are incorporated distinctly in the performance evaluation to segregate their impact from that of the structure of the banks. So, the effect of the former on bank profitability may be discerned more clearly.

The external factors that affect bank performance are as under,

- 1. Inflation rate.
- 2. GDP (Gross domestic product).
- 3. Stock market performance.

According to the definition of Inflation, a constant rise in the overall price level in the economy of a state. Inflation entails a reduction in savings and non-refundable per capita income of the individuals. This decreases the level of payments in the bank. As suggested by Athanasoglou, et al. (2008) demand for things decreases with an increase in inflation level which paved way for a reduction in demand for advances and loans from the banks. This may undesirably affect banks' performance in terms of profits. Inflation is greatly connected with the wellbeing of banks as banks deal in currency unit which is minimal financial instruments. For instance, when banks endow a loan to a debtor both parties agree on paying a certain amount of money (interest or mark-up) in the future. If the inflation rate increases in due course of time, the procuring power of currency to be paid in the future to the bank will drop. Moreover, projected inflation leads to an upsurge in the level of mark-up. Subsequently, the general public may presume that banks have to reimburse them more mark-up on their pledges to the bank. An upsurge in mark-up or interest rate on

advancing also causes a reduction in bank advances as the cost of funding has amplified. This is an objectionable situation for a debtor and they may abstain from getting advances from banks.

Demirgüç-Kunt and Huizinga (1999) emphasized that the GDP (gross domestic product) is the overall value of merchandise and services provided within the topographical boundaries of a state in one fiscal year. The per capita income of the people will be higher with a higher GDP rate which will raise the level of savings and investments and subsequently raises levels of credits of banks. So, an upsurge in GDP rate has a positive influence on banks' performance.

In a study, Kiganda (2014) suggested that a rise in GDP growth positively affects the performance and profitability of the bank industry. Analysts found three methods in which the profitability and performance of the banks can be affected. These are operating costs, net interest income, and loan losses improvement. Banks' performance improves with the expansion of the economy and GDP growth and vice versa. An expansion in GDP rate also escalates the income of the people living standards of the people of the country also improved. With the increase in income demand for services and goods also increases. This entails manufacturers to produce more things. For this purpose, they need loans from the bank to expand their commercial operations and business. The demand for more loans from banks positively influences the performance of the bank.

It was advocated in the study of Ongore and Kusa (2013) that growth in GDP rate is highly interrelated with the positive performance of the bank. Their study indicates that GDP has a deleterious correlation with ROA (return on assets) and it is positively connected with ROE (return on equity). Conversely, the results of their study further discovered that the above-mentioned correlation was not that noteworthy as it requires a supplementary analysis to show the impact of GDP on banks' performance.

Amassoma and Rukayat (2014) proposed the performance of the stock market as an indicator of the growth of an economy. The economy of the country will also perform better if the performance of the stock market would be better. That indicates that an increase in income of the people living in the country will facilitate an increase in the savings and investment level, which increases the demand for bank services advances in turn.

Chen et al. (2004) proposed that stock market performance can be assessed by observing the entire market capitalization per annum. It is also advocated by Tan and Floros (2012) that the
performance of the stock market is one of the main determinants that affect the profitability and performance of a bank. People will take more money out of the banks to purchase shares from the market if stock markets show good performance. This will decrease bank balances momentarily. Conversely, when enterprises receive this currency from investors, the actions of these enterprises would also increase which resultantly would increase the financial and economic activity of the economy. Consequently, the economy of the country will grow in size that would eventually raise the level of deposits in the banks.

# 2.8. Impact of Internal and External Factors on Performance of Banks A Global Overview

The existing literature is comprised of many studies that show internal as well as external determinants have a great influence on banks' profitability and performance. According to the study of Revell (1979) inflation affects the banks' performance to a great level. He stated that the influence of inflation on banks' performance and profitability depends greatly on the effects on salaries of the people and the other operational costs of the banks. In another study by Perry (1992), it was recommended that inflation influences banks' performance and profitability. The banks can regulate mark-ups appropriately to upsurge revenues faster than the costs. If a bank's management fully anticipated the inflation rate it would positively impact banks' performance and profitability.

It was noticed by Demirgüç-Kunt and Huizinga (1999) in their study of developing countries' banks, they stated that these banks tend to be lesser profitable in the environments of higher inflation rate chiefly if they have a higher capital ratio. The study allied to the developing countries revealed that the expenditures of the banks augmented faster than the revenues.

In a study in Turkey Unal et al. (2007) directed a comparative analysis of the performance of both public and private Turkish commercial banks for the period from 1997 to 2006. ROE (return on equity), ROA (return on assets) as well as net profit-loss were used as proxies to measure banks' performance and profitability. The researchers employed net assets efficiency associated with total employment, net profit, and a total number of bank branches to measure the operational proficiency of the banks. The result revealed that public or state banks are as proficient as the private banks of the country.

In the studies of the literature reviewed like Smirlock (1985), Agu (1992), and Chirwa (2001) it is described that the performance of a bank is denoted mainly by measurable financial gauges. As also described by Rauch et al. (2008) and Shen et al. (2010) the literature on the factors of banks' profitability and performance has meticulously linked with the measures of profitability such as Return-on-Assets (ROA), Return-on-Equity (ROE), and Net-Interest-Margin (NIM). Profitability and performance of the banks account for the effect of improved economic and financial soundness on banks' risk-bearing capability as well as on the capabilities of banks to perform liquidity-transformation.

Popa et al. (2009) explained general measures of bank profitability and performances are ROA (return on assets), ROE (return on equity), efficiency ratio, and net banking income. In a survey, Gilbert (1984) argued that profit is an important indicator of the performance of the bank. In other studies, some researchers evaluated the performance of the bank in terms of prices generated through interest rates rather than profitability. Berger (1989) and Chirwa (2001) justified it in this way that the price concentration relationship as a replacement for of profit concentration relationship accounts for the bank performance and their market structure. Further, they maintained that the relationship of price-concentration indicated the higher levels of concentration permit non-competitive conduct that will result from higher lending rates to borrowers and lower interest rates to investors.

Molynex and Forbes (1995) and Chirwa (2001) maintained that measures of bank performance like price generate problems of cross-subsidization of the multiproduct firm. The banking sector has experienced major revolutions worldwide in its operating milieu for the last two decades. Both domestic and external factors have influenced its structure as well as the performance of the bank. Similarly, the literature explained that the profitability of the bank is generally expressed as the interplay of internal as well as external factors.

For the first time, Molyneux and Thornton (1992) demonstrated the custom of internal and external factors by examining the profitability of 18 European countries' banks for the period 1986 to1989. Further, Demirguq-Kunt and Huizinga (1999) underscored both internal and external factors of profitability of 80 countries' banks for 1988 to1995. Most researchers evaluated bank performance by using ROA (Return on Assets) or ROE (Return on Equity) and employ variables i.e. size, capital adequacy, risk, and operational efficiency. The internal factors denote the elements instigates from

Bank accounts such as profit and loss accounts, balance sheets, and therefore termed as Bank specific or micro specific factors of bank profitability.

Chirwa (2003) investigated the correlation of market structure with profitability and concentration of commercial banks of Malawi by using time series data of 1970 and 1994. The researcher determined that there was a positive correlation between bank performance and concentration.

Adhikary (2006) asserted that the direct result of a large amount of Non-Performing Loans (NPLs) in the banking structure is economic slowdown as well as a bank failure. The causes of NPLs are usually accredited to the lack of operative supervision and monitoring on the part of the management of banks, lack of effective investors' recourse, flaws of the legal framework, and lack of operative debt retrieval strategies.

Hou (2001) claimed that there is no worldwide standard to define NPLs (non-performing loans) practically. Differences present in terms of the scope, the ordering system, and the contents. Such problems hypothetically add to chaos and insecurity in the NPL issues. Non-performing loans have a non-linear adverse effect on the advancing behavior of the banks.

The internal determinants include credit risk, capital ratio, size, productivity, and growth of the bank. Bourke (1989), in a study, found a significant positive correlation between banks' profitability and capital adequacy. He demonstrated that if the capital ratio will be higher, the bank will get more profits. In another more comprehensive study conducted by Demirguc-Kunt and Huizinga (1999) observed the factors of bank performance in 80 developing and developed countries from 1988 to 1995. They concluded that the profitability of the foreign banks was higher than that of local banks in the developing countries, but the opposite was the case in developed countries. However, the total results revealed support for the positive correlation between financial performance the capital ratio.

Several external determinants have been proposed by Athanasoglou et al. (2005) that impact banks' profitability. These determinants can further be described as control variables that define the macro-economic milieu, such as interest rates, inflation, cyclical output, and some other variables like market concentration, industry size, and ownership status that denote market structure. Likewise in another study, Haron (2004) explored the factors of profitability of banks for the previous three decades. The researcher managed to inspect and categorize several factors that greatly affect banks' profitability and profitability. Though all previous studies on bank profitability were done on conventional banks no study was found to define the profitability and performance of the Islamic banking system. The study inspects the influence of the determinants that donate to the profitability of Islamic banks. The study conducted by Haron (2004) discovers that internal determinants like assets invested in Islamic sanctuaries, total expenditures, liquidity, and the percentage of return sharing ratio amid banks and debtor of funds are enormously correlated with the levels of overall profits and returns gained by Islamic banks. Same impacts found for external determinants like interest rates, size, and market share of the bank. Supplementary factors like capital deposited into current-accounts, money supply, total investment and reserves, the portion of profit-distribution amid banks and depositors, also play a strong impact on the performance of Islamic banks.

In his research work in Sudan, a country that employed a total Islamic financial and banking system, Eljelly (2013) intended to discover the factors affecting bank profitability on the Islamic banking system in Sudan. The findings of the studies revealed that only bank-specific or internal factors have a noteworthy influence on the performance of the banks as calculated by ROA (return on assets), ROE (return on equity), and MARG (net financing margin). More specifically, the liquidity, size, and cost of the banks have a significant and positive impact on banks' performance. Though, macro-economic or external determinants are categorized as terminated factors that have no considerably noteworthy influence on the performance of the banks. These findings of the study have a predilection in the existing literature as a few countries specified works show next to nothing effects of macro-economic factors on performance and profitability of commercial banks. Additionally, the study revealed that the data was presented in a random-effects model in relation to fixed effects or pooling assessment models. Lastly, this research paper has numerous effects on commercial banks, depositors, and regulators for costs, bank structure liquidity, and liquidity in Sudan.

Bintawim (2011) presented a comparison of the profitability analysis of Saudi commercial banks. He examined the influence of internal or managerial characteristics or indicators of banks on the economic performance and profitability of the banks. He analyzed financially a total number of eleven commercial banks from 2005 to 2009. He employed panel data regression and ratio analysis model to investigate the hypothesis of the research. The findings revealed that a large number of the banks reached the developed growth in performance different from medium-sized banks of the country. They are developing to strive against outsized banks of the country but small-sized banks were facing problems in attaining better progress. The findings of the studies revealed that all Saudi banks were performing well to sustain good progress in the bank industry. Furthermore, regression outcomes specified that the indicator of bank size has a negative influence on the economic performance of the bank, whereas the indicator of asset-utilization positively influences the profitability of banks in Saudi Arabia. Besides, increasing expenses of the banks' operatives leads to escalate the net special directive and decrease ROA and ROE.

In a study conducted by Ahmad Aref Almazari Ramadan et al. (2011) for the tenacity of exploring the interrelationship of the characteristics of micro or internal factors and environmental or external factors of profitability of banks. A stable panel data set of Jordanian banks was employed. The study was comprised of 100 annotations of 10 Jordanian banks from 2001 to 2010. The variables of ROA (return on assets) and ROE (return on equity) of banks' performance and profitability have been applied for this purpose. The results revealed that the characteristics of the Jordanian banks elucidated a noteworthy part of the variation in bank profitability. A high rate of profitability of the Jordanian bank industry tends to be linked with high lending activities, low credit risk, well-capitalized banks, and the efficacy of cost-management. The findings of the study revealed that the expected impact of the size of the bank did not support the noteworthy scale parsimonies for Jordanian banks. Lastly, the estimated results specified that separate effects on the performance and profitability of the bank were present. This is decided to owe to the fact that some of the discrepancy slope coefficients were statistically important.

In United States Berger (1995) inspected the interrelationship of the return-on-equity (ROE) and the ROE to assets-ratio, by using the Granger causality model for the sample banks in the US from 1983 to1992. He explored that there is a positive interrelationship of ROE (return on equity) with equity to asset-ratio.

In another study, an appropriate econometric model was developed by Scott and Arias (2011) whereby the principal factors of profitability of the topmost five banks of the United States were examined and analyzed. The econometric model employed in the study included internal

physiognomies of the banking institutions as they were related to their ROA (return-on-assets) and external physiognomies in which they contest and measured by GDP growth rate was developed. The model was founded on directions provided by industry experts and economists to determine the effect of the external determinants (i.e. national-economy and size of the bank) of these 05 principals as measured by total-assets-ratio. The findings demonstrated that the factors affecting the performance and profitability of the banks have a positive interrelationship of ROE (return on equity) with CAR (capital to asset ratio) and the annual percentile changes in GDP (per capita income).

In a study on the evaluation of the performance and profitability of Islamic banks, Bashir (2003) explored that the banks; characteristics and the total financial-environment could influence the performance and profitability of the Islamic banking industry. By exploiting banks' level data, the researcher observes the impact of internal determinants on bank Profitability and the performance parameters of the Islamic banking industry in eight ME (Middle Eastern) countries working especially in Saudi Arabia and Jordan from 1993 to 1998. A number of both internal as well as external indicators were employed in the study to calculate and measure the profitability and effectiveness of the banking system in these countries. Broadly speaking, the analysis of factors affecting the profitability of Islamic banks approves the findings of the previous studies. The findings indicated that for taxation, macro-economic environment, and financial-market-structure, the higher loan-to-asset and capital-to-asset-ratios lead to the high profitability of the banks. The findings of the study also revealed that foreign funding banks were more expected to be profitable than the local (public, private) banks. The regression results demonstrated that implied and explicit taxes influenced the profitability and performance of the bank negatively whereas encouraging macroeconomic conditions influence the performance measures positively. The findings of the study also indicated that banks and stock markets were complementary to each other.

Research conducted by Gupta and Kaur (2008) to examine the performance of the private sector banks functioning in India. They employ the CAMEL model by rating or scaling the top and bottom five banks private commercial banks in India. They ranked 10 new and 20 old Indian private banks by following the CAMEL framework. The research covered economic data from 2003 to 2007. The study was determined by CAMEL Model discovered that Housing development finance corporation (HDFC) was at its highest position of all private banking sector in India.

The determinants of profitability are ultimately divided into two broad groups, the internal well as external determinants. The internal factors include managing control-able determinants like an investment in securities, liquidity, and investment in subsidiaries, loans, overhead expenditure, and nonperforming loans. Other factors include money supply; fixed deposits, current account deposits, capital reserves, and total capital, and savings also play an important role in affecting the profitability of the bank. Likewise, external factors were comprised of those determinants which were outside the control of bank management like inflation rates, interest rates, market share, and market growth.

According to the study of Syafri (2012), the determinants that affect the profitability of the bank may be internal as well as external. Internal factors that affect bank profitability are those determinants that are controlled by the management of the bank such as objectives, decisions, and the bank policy. External factors are those determinants that are beyond the control of a bank, like inflation, competition, money supply, and government regulations, Staikouras.K.CH and Wood.EG, (2004) described the same factors in their study.

As cited in the research titled 'Banking Management' Luboteni. G (2008) described effective management as the determining factors of profitability of commercial banks. He further described that effective management segregates successful banks from unsuccessful banks. The researcher ruminated rates of return to capital markets and the reimbursement rate by assets as a measure of bank profitability.

Adeusi. OS, Kolapo.TF and Aluko. OA (2014) conducted another research on the factors affecting banks' performance and profitability in Nigeria. They focused on internal as well as macroeconomic determinants where the cash ROA (return-on-assets) was dependent on asset quality, capital adequacy, management efficiency, inflation, liquidity, and GDP (gross domestic product) were used as variables that denoted banks' profitability. The study employed a sample data of 14 commercial banks from 2000 to 2013. The findings revealed that the key factors determining bank profitability included asset quality, GDP, and the management efficacy that had a noteworthy effect on bank performance and profitability. However, the researchers did not castoff the significance of inflation rate and capital adequacy on the profitability of the bank.

In their research titled 'Banking Profitability Determinants', Scott.WJ, and Arias.CJ, (2011) employed two main factors influencing the profitability of banks that fund ROA (return-on-assets)

as an internal or managerial determinant, and GDP rate as an external or environmental determinant. The researchers analyzed the data taken from the top five banks in the US (United States) for the period of the last 5 years. The findings of the study indicated that all banks in the US had an upsurge in their average weighted ROA (return-of-assets), despite the decline in GDP per capita.

In research conducted by Staikouras.K.CH, Wood.EG, (2004) on the factors affecting bank profitability, they included 685 European banks as the data source. They focused on the ROA (return on assets), capital adequacy, loan-risk, capital-risk, the size of the banks, interest rate variability, efficacy as a measure of cost, the rate of GDP growth, the interest rate, and the gross per capita income for all European countries. Lastly, the researchers determined that the capital-adequacy and the size of the banks positively affected the profitability of the bank whereas the capital risk and the risk of loans were in reverse associated with the profitability of the bank. As far as the macroeconomic variables are concerned it is derived from the results that the interest rates affected the profitability of the bank positively whereas the GDP growth rate and variability of the interest rate negatively affected the profitability of the bank.

Abreu and Mendes (2002) assessed the factors of banks' profitability and NIM (net interest margins) in some European economies. They discovered that banks having a good amount of capital face low anticipated liquidation-costs and this advantage resulted in better performance of the banks. It shows a negative impact on all the models of regressions, the unemployment rate is pertinent to explain banks' profitability. The inflation-rate is also associated with it.

A research was conducted by the authors, Alexiou. C, and Sofoklis. V (2009) in which they analyzed data collected from the top six banks in Greece for a period of 2000 to 2007. The researchers considered ROE (return on equity) as a representative in their model to determine bank performance and profitability. Important determinants of analysis were the size of the bank, loan risk, capital, risk of liquidity, productivity, and cost-efficiency. Macro-economic factors employed in the research were inflation rate, GDP growth, interest rates, and private consumption. The findings of the study revealed that productivity and the size of the banks had a significantly positive relationship with the profitability of the bank while loan risk, liquidity risk, and efficiency as measured by cost and had a significantly negative relationship with bank performance. Evaluating the macro-economic variables, private consumption and inflation rate had a positive relationship

with bank profitability, and GDP growth has an insignificant influence on the profitability of the bank.

Ayanda.MA, Christopher.I and Mudashiru.AM (2013) researched First Bank in Nigeria from 1980 to 2010, the research model was designed in which dependent variables were ROA( rate of return on assets), ROE (return on equity), and NIM (net interest margin) independent variables were bank size, capital adequacy, loan risk, liquidity risk, management efficacy and effectiveness of labor. The macro-economic variables employed in the model included GDP growth rate, inflation rate, and money supply, etc. The research concluded that a lack of capital, loan risk, and liquidity risk negatively affected the bank profitability whereas the efficacy of the management positively affected the profitability of the bank but the size of the bank did not influence bank performance and profitability. In the milieu of macro-economic variables only the supply of the currency can be measured as the factors of banks' profitability as it had a substantial correlation with profitability, other variables i.e. inflation rate and GDP according to the result of the study not determine the profitability of banks.

Abuzar (2013) conducted a study on the factors affecting banks' profitability and performance of Islamic banks working in Sudan. The findings of the study highlighted that only the managerial or internal determinants have a considerable influence on the profitability and performance of commercial banks. Size of the banks, cost, and liquidity have a positive correlation with the bank's performance and profitability. External or macro-economic factors have little or no considerable effect on bank performance and profitability.

Dr. Srinivas Madishetti et.al (2013) investigated the determinants affecting the profitability of commercial banks of Tanzania from the period of 2006 to 2012. In microeconomic or internal determinants employed variables of credit risk, liquidity risk, operating efficiency, capital adequacy, business assets, and external or macro-economic determinants employed the variables i.e. inflation-rate and GDP growth rate. These variables are independent. The findings of their study revealed that internal or managerial variables delineate the banks' performance and profitability however external or Environmental factors do not influence the performance and profitability of Tanzanian commercial banks.

In a study on nine developing republics including Turkey, Yılmaz et al. (2013) investigated factors affecting profitability and performance of the banks. The fallouts of the study exposed that

capitalization, operating expenses management, bank size, credit risk, and inflation are important elements for ROA (return-on-asset) and NIM (net-interest-margin) as dependent variables.

Zeitun (2012) employed some dominant factors i.e. foreign ownership, macroeconomic factors, and banks-specific variables) on Islamic and conventional banks in GCC (Gulf-Cooperation Council countries) for the period of 2002 to 2009. The findings of the study revealed that banks' equity is significant in highlighting and growing only the profitability of conventional banks. While the cost-to-income had a significant but negative effect on the performance of conventional as well as Islamic banks. Furthermore, the expected effect of the size of the bank conveys an indication of markets of scale in Islamic banks about ROE (return on equity) whereas it is not substantial for the conventional banks of the states. However, the indicator of foreign ownership does not influence the performance of both conventional and Islamic banks. Additionally, banking development and the age of banks both have no significant effect on banks' performance. As a final point, GDP has a positive interrelationship with banks' performance and profitability, whereas inflation-rate has a negative interrelationship with banks' performance and profitability.

In Nigeria, Ani, Ugwunta, Ezeuduand and Ugwuanyi (2012) directed a study in which they explored the factors of the profitability and performance of banks, how and to what extent people deposit money in banks in Nigeria. The main findings of the study revealed that a rise in size and properties of the bank i.e. greater total assets of the banks may not essentially lead to greater returns due to diseconomies of scale i.e. advances and greater capital-assets-ratio and loans highly contribute to the profitability and performance of the bank. In aggregate, the study proposes that the size of the bank, its assets, and its capital configuration are the major endogenous factors of the performance and profitability of a bank in Nigeria.

In Indonesia Syafri (2012) examined the indicators that affect the performance and profitability of commercial banks. The experiential findings exposed that total equity to total assets, total advances to total-assets, loan' loss endowment to total-loans have a positive impact on the profitability and performance of the banks. Whereas the size of banks, inflation rate, and (BOPO) cost-to-incomeratio harm banks' profitability and performance. Non-interest-income to total-assets and the economic growth rate has zero impact on banks' profitability and performance.

A study was conducted on the performance of South African commercial banks by Kumbirai and Webb (2010). They inspected the commercial banks of South Africa from 2005 to 2009. The findings of the study revealed that banks' overall performance was augmented significantly during the analysis of the first two years of study. A substantial variation was noticed in the trend in 2007, during the inception of the global financial crisis. Which was further increased during 2008-2009 and resulted in low liquidity, falling profitability, and declining credit quality of the commercial banks in South Africa.

Hamiltona, Qasrawiband Al-Jarrah (2010) analyzed the profit efficiency and cost of the banking industry in Jordan for the period of 1993-2006. They employed a parametric method 'stochastic frontier analysis' in their study. The findings of this research illustrate that the profit efficiency levels were very below those corresponding to cost efficiency and alternative profit efficiency being below standard profit efficiency. These findings of the study inferred the presence of market power in the bank industry of Jorden concerning the background of prices and costs or the presence of variances in the value of banks' manufactures reflected in the variances of costs and prices. Moreover, the results revealed Islamic banks are less cost-efficient while commercial banks and investment banks are more profitable and efficient and cost-effective. In another study of Ramadan, Kilani and Kaddumi (2011) explored the interrelationship of the internal as well as external determinants that affect the performance and profitability of banks with banks' characteristics. The findings of the study revealed that in Jordan characteristics of the banks expose a noteworthy role in the discrepancies in performance and profitability of banks. Higher profitability of the banks in Jordan inclines to be linked with higher advancing actions, wellcapitalized banks, the efficacy of cost-management, and low credit risk. The findings also revealed that the expected effect of the size of the bank did not aid the substantial scale economies of banks in Jordan. Lastly, the expected results of the study directed that divergent influences on the banks' profitability and performance were seen this is determined from the fact that some of the inconsistency slope constants are statistically important.

Bashir (2003) in another study, inferred that high advance-to-asset and capital-to-asset ratio lead to greater profitability of the banks. The findings of the study indicated that banks with foreign ownership are expected to be profitable. The regression outcomes of the study displayed that explicit and implicit taxes impact the profitability and performance of the banks negatively however advantageous macro-economic conditions influence the performance and profitability of the banks positively. The findings also revealed that the banks and stock markets are complementary to each other.

Athanasoglou, Delis, and Staikouras (2006) opined that except liquidity all other determinants that are bank-specific considerably impact profitability and performance of the banks in an expected way. Additionally, he explored that the effects of concentration are positive, that provides evidence to support the structure-conduct-performance hypothesis, but there is some ambiguity in its relationship with the efficient-structure hypothesis. Contrary to it a positive interrelationship between bank reforms and profitability of the banks was not identified, whilst its relationship with macro-economic factors is mixed.

Kosmidou (2007) conducted a study in the fifteen European Union countries to analyze the factors affecting the profitability and performance of domestic, foreign, and commercial banks from 1995 to 2001. He examined banks' specific characteristics and the effect of the overall environment of the bank on the performance and profitability of the banks. The findings revealed that the performance and profitability of both the domestic and the foreign banks are influenced by banks' specific characteristics, by the structure of the financial market and macro-economic conditions of the banks. In the exception of concentration, all these variables, in the case of the profitability of domestic banks are substantial whereas their influence and relationship with profitability for domestic and foreign banks is not always the same.

In Korea, Sufian (2011) examined the macro-economic and bank-specific factors of profitability of bank industry from 1992 to 2003. The experiential results revealed that diversification, liquidity level, credit risk, industry concentration, and business cycle considerably affect banks' performance.

The latest combine research of Sufian and Noor, M (2012) exposed the effects of internal and external determinants on the performance of Indian banks for the period of 2000 to 2008. The empirical results stated that liquidity, size, credit risk, and operating expenses had a statistically substantial influence on the performance and profitability of the banks in India,

In Spain, Ponce (2012) examined the determinants that affect the profitability and performance of Spanish banks during the period 1999 to 2009. The research work indicated that the higher

profitability of the banks during the mentioned period was related to a greater percentage of advances, an increase in the customers' deposits, and better efficiency was seen. The findings of the study determined that on the scale level existing in the banking industry of Spain, no evidence of the economies or dis-economies were seen.

Chiorazzo et al. (2008) conducted a study on the Italian banking industry to examine the factors that affect the performance of the banks. The findings of the study indicated the interrelationship of profitability and non-interest revenues was robust at large banks. The study also indicated that by increasing non-interest income, small banks can make greater profits.

In another study by Flamini et al. (2009), the researchers examined the factors of banks' profitability. They gathered data from a sample of 389 banks from the period of 1998-2006. The results of the study highlighted that higher returns or profits on assets are interrelated with the larger size of the banks, the diversification of the activity these banks perform, and the ownership. Consequently, the study underlined the policy of implementing higher capital requirements to indorse financial and economic stability.

Khrawish (2011) investigated the actors that influence commercial banks' performance in Jordan for the period of 2000–2010. He explored that there is positive and significant interrelationship of ROA (Return on asset) size of the bank, total-equity to total asset ratio, total-liabilities to total asset ratio, NIM (net-interest-margin), and exchange-rate of all the commercial banks. Additionally, he found a significant but negative interrelationship of ROA to the annual growth rate for GDP, and the rate of inflation. The study also inferred a significant as well as positive interrelationships of ROE to the size of the bank, total liabilities to total assets, NIM, Exchange Rate, and advances to total assets. The findings of the study revealed a significant but negative interrelationship of ROE with annual growth-rate for GDP and the commercial banks' inflation-rate.

In the study on European banks for the period of 2006–2009, Doumpos and Kosmidou (2012) employed methods of multi-criteria-analysis. Value function model, cross efficiency technique, and outranking approaches were employed to assess the financial performance and profitability of the banks. The results of the study gave expedient discernments of the performance and profitability of the banks, the interrelationship of the banks' performance and their size, the

influence of the global financial crisis, and the stability of the assessments over time and determinants that affect the profitability and performance of banks.

In Kenya, Ongore and Kusa (2013) conducted a study to evaluate the impacts of 'ownership structure' on the performance and profitability of banks. To estimate the parameters, they employed GLS (Generalized-Least-Square) on panel-data. The findings of the study revealed that the macro-economic determinants have an inconsequential influence on bank performance. Furthermore in Kenya, the financial performance of all the commercial banks is motivated principally by the board of directors or managements' decisions.

Shipho (2011) observed the effects of bank industry determinants of the profitability and performance of commercial banks. In another study, Osoro (2013) examined financial reorganization as a factor affecting the financial performance of commercial banks.

In a broader study on bank performance, Lee and Hsieh (2013) examined the influences of banks' capital and risk on the performance and profitability of 42 Asian countries for the period of 1994–2008. The findings of the study revealed that low-income economies have a greater financial impact on the performance and profitability of the banks. It was also displayed that the investments of the banks have the lowest but positive capital impact on the performance and profitability of banks. It was indicated that Middle East economies have a positive and greater capital effect on the performance and profitability of the banks.

Fadzlan Sufian et.al (2008) examined the factors affecting the performance and profitability of banks in the Philippines during the period 1990 to 2005. The findings of the study revealed that internal determinants have a substantial influence on the profitability of banks. The research work also stated that if the credit risk and expense related behavior amplified the performance and profitability of the banks functioning in the Philippines dwindled. Capitalization and non-interest income both have a positive interrelationship with banks' profitability. The findings of the study also accepted that the increased rates of inflation decreased the profits of the Philippines banks respectively.

The study of Bourke (1989) highlighted the levels of staff expenses have a negative influence on the ROA of banks. Although Molyneux (1993) inferred a positive interrelationship of staff expenses on total profits. External or environmental factors of banks' profitability are not influenced explicitly by banks' policies and decisions but influenced by outside elements of the bank. Except inflation and GDP no external factor affects banks' performance significantly.

The study suggested a dire decrease in balances with State or central bank, cash reserve ratio, and liquidity ratio figures by the financial authorities of banks to enable them to create satisfactory credits and onset more cash in motion for effective economic intermediation to transpire and to ensure efficient and effective management of banks by increasing liquidity to adequate levels to optimize performance and profitability of the banks. It also curbs recurrent unscrupulous banking actions i.e. directly engage in trading, import and export of goods, and other speculative deals, instead of lending to the domestic economy.

In the UK, Goddard et al. (2004) explored the interrelationship of the capital with asset ratio and the banks' profitability. The findings of the study explored that despite escalating competition there present substantial perseverance of anomalous profit from year to year. The results also submit the indication of any consistent or systematic relationship of the size with banks' profitability was comparatively weaker while the interrelationship of the prominence of off-balance-sheet business in the profitability and portfolio of banks was positive. But it was found either negative or neutral elsewhere. Moreover, the relationship of the capital with assets ratio was positive.

Naceur (2003) highlighted that individual bank's characteristics in Tunis elucidate a considerable role in banks' interest margin and overall performance and profitability of the banks. Higher profitability and total interest margin tend to be linked with the banks that embrace a comparatively great quantity of capital with larger disbursements. Other significant internal factors of banks' interest margins advances have a significant and positive influence on the profitability and performance of the banks. Banks' size has a significant but negative effect on banks' net interest margins. These findings reveal scale inefficiencies.

The findings of the study also revealed that external or macro-economic determinants i.e. growth rates and inflation have little or no influence on banks' profitability and interest margin. The study reviewed the influences of financial structure on banks' profitability and interest margin, explored that for Tunisian commercial banks concentration was lesser useful than competition. Additionally, developments in the stock market have a significant and positive impact on banks' profitability and performance. This highlights the importance of the interdependency of banks on

the growth of the stock market. The study also revealed that the dis-intermediation of the economic system is favorable for the profitability of the banking sector in Tunis.

Deger Alper (2011) investigated the internal as well as external determinants of banks' performance and profitability in Turkey for the time duration of 2002 to 2010. The study employed variables of ROA (the return on assets) and ROE (return on equity) as dependent variables and independent variables were the function and influence of internal as well as external factors on banks profitability. The findings of the study revealed that the profitability of the banks increases as the asset size and non-interest income increase. The study also indicated that real-interest-rate in the external or environmental determinants has a positive impact on banks' profitability and performance.

In Malaysia, Guru et al. (2002) explored the factors affecting the performance and profitability of banks. In this study, the researchers employed seventeen commercial banks and the period for the study was from 1986-1995. The factors were categorized into two broad categories, the internal or managerial factors that include capital adequacy, liquidity, and expenses management) and the external or environmental determinants that include ownership, the size of the bank, and economic or financial conditions. The finding of the study revealed that proficient expense management was the most important determinant which explains that a higher bank hypothesis has a particular point of attention in the study.

The experiential outcomes of the study suggested that capital ratio, inflation, labor productivity growth, operating expenses, and cyclical yield significantly impact banks' performance and profitability. Contrary to it, the influence of the size of the bank and the ownership were not observed because of its zero effect. Moreover, the SCP (Structure Conduct Performance) hypothesis on the performance and profitability of banks has an insignificant or low effect. While inflation has a positive and significant impact on banks' performance.

In Malaysia, Jamal and Hamidi (2012) observed the macro-economic factors of banks' profitability of Malaysian banks. The researcher employed panel data from 2004 to 2011 in the study. Sixteen banks containing eight local (domestic) and eight overseas (foreign) banks. ROA (return on asset) was employed as dependent variables in the research whereas independent variables i.e. GDP (gross domestic product) economic growth rate, inflation, advancing rate, and stock market development were employed. The research established three models for regression analysis. In the

first regression model, all sixteen commercial banks were analyzed. In the second regression model, only domestic or local banks were analyzed. In the third regression model, only foreign banks were analyzed.

The findings of the study revealed that the interrelationship of inflation with (ROA) return on an asset in all these three regression models was significant and positive. Stock market growth in all these three regression models was negative but significant. Lending-rate in the first, as well as the third regression model, relished both positive and substantial interrelationship with banks' profitability but in the second regression model portrayed an insignificant and negative interrelationship. Correlation of real GDP (gross domestic product) with the profitability of banks under all these models has a positive but insignificant influence on foreign banks but significant effects on the other two models.

In China, Garcia-Herrero et al. (2009) investigated the key factors of performance and profitability of banks. They employed panel data set on 87 different big and small Chinese banks from 1997 to 2004. The findings of the study revealed that well-capitalized and more X-efficient banks and the banks with a relatively greater share of deposits incline to be more profitable and show better performance. Therefore, a lesser concerted bank system with a lower government influence and intervention raises banks' performance and profitability. As far as the macro-economic variables are concerned, high mark-ups on loans and advances and inflation increase the profitability of banks. Whereas the instability of mark-ups reduces it.

Ian (2003) discussed the interrelationship of inflation and performance with investment. Decisionmaking is also related to it. It is noted that sensible decisions of the management about investments, production, borrowings, wage settlements, cash management, and international-trade all these indicators entail the usage of material from the price-system to make longer-term resolutions.

In another study on the impacts of internal as well as external determinants on the profitability and performance of Macao's banking sector, Vong and chan (2006) conducted a longitudinal study for 15 years. The findings of the study indicated that a higher level of capitalization paved way for a higher rate of profitability. The study also revealed that greater banks' size increases banks' performance and profitability. It means that banks enjoy the benefits of markets of scale. Contrary to it, loan-loss-provision also influence the profitability and performance of the banking industry of Macao unfavorably.

In Bangladesh, Abdullah, Parvez, and Ayreen (2014) investigated the effects of the macroeconomic determinants affecting the performance of 26 commercial banks for the period of 2008-2011. The results of the study show that there is a significant and positive interrelationship of banks' profitability, and external indicators i.e. capital-adequacy, size of the banks, and advances to total assets.

### 2.9 An Overview of the Previous Studies on Bank Performance in Pakistan

Though a lot of studies have been conducted for the development of commercial banks' proficiency globally few studies have been conducted on the bank industry of Pakistan. Few studies assess the performance of the banking industry in Pakistan. The study of Ataullah et al. (2004) presented a comparative-analysis of Indian and Pakistani commercial banks for the years 1988 to 1998. Their study revealed that the productivity level in the loan-based-model was considerably greater as compared to the income-based-model. But the banks of both the countries' need improvement in their efficiency.

In a study on the Pakistani commercial banking system, Burki and Niazi (2006) inspected the influence of financial developments on the effectiveness of local (public and private) and foreign banks. They analyzed the factors affecting banks' performance by employing data of 40 commercial banks from 1991 to 2000. They establish a positive influence of banks' size, interest income to earning-assets, and advances to deposit-ratio on estimated efficiency-scores.

Javaid et al. (2011) scrutinized the indicators of banks' profitability in the top 10 Pakistani banks from 2004 to 2008. The study focused on the internal determinants of bank performance only. They employed the POLS (Pooled-Ordinary-Least-Square) method to probe the effect of loans, assets, equity, and credits on a major indicator of banks' profitability ROA (return-on-asset). The experimental findings establish a strong indication that these variables have a solid impact on the profitability of banks. Though, the findings of the study show that higher total-assets may not essentially lead to greater returns due to diseconomies of scales. Likewise, a greater loan ratio contributes towards the banks' profitability but their influence is not significant. Equity and Deposits have a significant impact on profitability.

In another aspect, Gull et al. (2011) confirmed a relationship between macro-economic and bankspecific physiognomies of bank profitability. He employed data of the topmost 15 Pakistani commercial banks from 2005 to 2009. The researcher used the POLS (pooled ordinary least square) method to examine the influence of assets, equity, deposits, inflation economic growth, market capitalization, and loans on main profitability indicators that is ROA (return on asset) and ROE (return on equity) ROCE (return on capital employed) and NIM ( net interest margin) separately. The experimental results indicated solid evidence that internal and external determinants have a solid impact on the profitability of the bank.

The study of Gul, Irshad, and Zaman (2011) showed the impact of internal a well as external indicators that affect profitability on 15 commercial by the pooled ordinary least square method. They initiate the fact that both these indicators strongly affect the profitability of the banks. The position of larger banks is far better than the smaller banks. These banks earn greater profits and returns as compared to the smaller banks. Therefore, banks are directly correlated with the profitability and performance of the banks. Deposits-to-total-assets have a positive and significant influence on the profitability of the banks. Similarly, Loans-to-total-assets and equity-to-total-assets ratios have also similar effects on banks' profitability.

In a comparative analysis on India and Pakisan, Ataullah et al. (2004) analyzed factors affecting the profitability of commercial banks for the period of 1988 to 1998. The researchers inferred that the efficacy score of the advances-based-model was in comparison much greater to the income – based-model.

In another study by Anuar, Choo, Khan, and Khan (2011) explored factors affecting the performance and profitability of banks on 16 sample banks in Pakistan for the period of 2000-2010. The findings of their study revealed that banks' size was an important determinant which shows that the increased size of banks increases the ability of banks to get more profit and earn more in stock markets.

The findings of their study also revealed that the effects of NIM (net –profit-margin) considerably contribute and have a positive impact on banks' profits whether the size of the bank is small or large. The researchers also deduced that the deposits to asset ratio and advances to asset ratio substantially influence the bank's performance and profitability.

Malik (2011) conducted a study on the determinants of profitability of 35 scheduled life-insurance and non-life insurance corporations of Pakistan for the period of 2005-2009. The findings of the study revealed that the size and capital volume of the companies has a positive but significant impact on the profitability and performance of the companies. Contrary to it, the leverage-ratio has a significant but negative correlation with the profitability and performance of the companies.

A study was conducted by Akhtar, Ali, and Sadaqat (2011) on micro-economic and macroeconomic determinants of commercial banks' performance and profitability. The researchers investigated the data collected by a sample of 22 commercial banks. In this study descriptive statistics were employed, regression analysis and correlation model were used. ROA (Return on assets) and ROE (return on equity) have been employed as dependent variables. Both, internal or Managerial and external or Environmental determinants were employed as independent variables. The data was then analyzed and tabulated through SPSS from 2006 to 2009. The findings of their study revealed that the total assets ratio, assets management, and asset equity, all these indicators have a positive interrelationship with profitability and performance of the banks. Although, the indicator of credit risk has a petty effect on banks' performance and profitability. Furthermore, the findings of the study revealed that a bank's size was positively interrelated with banks' performance and profitability. It indicates economic markets of scale, which means that with the increase in banks' size the performance and profitability of the bank will also increase.

The findings of the study revealed that with the increase of economic development the profitability and performance of the bank also increases. Contrary to it with the increase of the indicator of credit risk the profitability of the bank also decreases.

In Pakistan, Riaz (2013) premeditated the internal and external determinants of banks' profitability in his study on 32 commercial banks. The time duration of the study was 2006 to 2010. The findings of the study showed that the size of the banks, total-deposits to total-assets ratio, and advances to total-assets-ratios were considerably interrelated with the (ROE) return on equity and have a noteworthy effect on the profitability of commercial banks in Pakistan.

In another study on the profitability of commercial banks in Pakistan, Sohail, Iqbal, Tariq, and Mumtaz (2013) examined internal and external factors and their impact on the performance of banks. They employed cross-sectional-time-series data in their research work. It was revealed that indicators of internal or managerial factors like, assets-composition, debt-composition and

liquidity have a significantly positive relationship with the profitability of banks. The study also revealed that indicators of external factors like bank size also have a significant effect on the profitability and performance of commercial banks.

In another study on commercial banks, Jabbar (2014) inspected banks' profitability in 31 commercial banks in Pakistan from 2009 to 2012. The findings of the study revealed that banks' size and capital of the banks are positively interrelated with banks' profitability. The findings of the study also showed that the influence of loan-loss-provision, deposit growth, and interest-expense on banks' has a statistically insignificant impact on banks' profitability.

The study of Khan et al. (2011) investigated the bank-specific factors of profitability of banks from 2000 to 2010. The sample of the research comprised of sixteen banks in Pakistan. The study employed net-profitability as an extent of banks' profitability. In this study indicators i.e. deposit-to-asset-ratio, advances to assets-ratio, advance development, (NPL) non-performing-loans, ROA (return on assets), operating expenses, insider trading, tax-paid-on-net-income, non-interest-income, and NIM (net interest margin) were employed as independent variables. The variables i.e. deposit to loan-ratio, deposit to asset-ratio, advances to assets-ratio, loan development, NIM (net interest margin) and ROA (return on assets) illustrate a significant and positive interrelationship with performance and profitability of the banks. While overhead-expenses and Taxes have a negative and substantial interrelationship with the banks' profitability. These findings depict that the rise in both the taxes and expenses decrease the bank's profitability. Equity to asset-ratio, non-interest income, and insider trading have an insignificant effect on the net profits of the banks.

Dawood (2014) assessed the internal and external determinants of profitability and performance in 23 commercial banks working in Pakistan from 2009 to 2012. The study employed dependent variables of ROA (return on assets) however the independent variables were liquidity, costefficiency, deposits, capital-adequacy, and banks' size. The methodology and analysis techniques used by the researcher comprises logarithm techniques. Mode of data analysis includes descriptive, correlation, and regression analysis.

The panel data employed in this research exploited the data collected from twenty-three sample commercial banks in Pakistan. The sample consisted of four public or government commercial banks, four conventional Islamic banks, two overseas or foreign banks, and thirteen privately managed commercial banks. The findings of the study revealed that deposits have a weaker and

negative influence on ROA (return on assets). The regression analysis designates a significant but negative effect of cost efficiency and liquidity on ROE (return on assets). Deposits and capital-adequacy both have a positive impact on ROE (return on assets) conversely credits have an insignificant interrelationship whereas capital-adequacy has a significant interrelationship with ROE (return on equity). Bank's size has an insignificant but positive interrelationship with ROA (return on assets).

The discussion done in the literature review sustains a strong interrelationship between the banks' profitability and performance with the internal as well as external determinants. The present research work covers the research gap of the literature by testifying the effects of internal and external factors on the performance of commercial banks in Pakistan. In the literature review section different independent as well as dependent variables have been discussed from the existing literature, But in this study ROE, ROA, and EPS (earning per share) were employed as independent variables.

In this chapter existing literature on the internal and external factors affecting the performance of the banks is studied. The next chapter would deal with the research methodology in which methods of data collection and data analysis will be discussed.

# **CHAPTER 3 RESEARCH METHODOLOGY**

The preceding chapter has indicated the literature on the impact of different internal and external factors on bank performance. Both theoretical and empirical reviews were made and indicated the following:

- 1. Some Researchers had discussed only internal factors using CAMEL model approaches but missed out on some external factors which also affect the bank performance.
- 2. Some Researchers had discussed the impact of the external and internal factors on bank performance. But their research was limited to Islamic banks, microfinance banks.

In my research, I have discussed and made theoretical and empirical reviews of internal and external factors on bank performance.

The purpose of this chapter is to empirically examine the quantitative effect and impact of internal and external factors on the performance of Commercial Banks in Pakistan for 6 years (2013-2018) as both the independent and dependent variables are measurable. To this end, a model of the specification is also presented here to test the relationship between the independent and dependent variables and to test the hypothesis.

# **3.1 INDEPENDENT VARIABLES:**

# **3.1.1 INTERNAL**

- Advances
- Investment
- Deposit
- Borrowing
- NPL

# **3.1.2 EXTERNAL:**

- Inflation
- State Bank of Pakistan Policy Rate
- Gross Domestic Product

### **3.2 DEPENDENT VARIABLES:**

### **3.2.1 BANK PERFORMANCE**

- Return on Asset (ROA)
- Return on Equity( ROE)
- Earnings per Share (EPS)

### **3.3 EXPLANATION OF VARIABLES:**

#### 3.3.1 ADVANCE:

Advances are an important component of the balance sheet of a bank on its asset side. Bank generate income in the form of markup/profit from advances. Advances are liquidity for an individual and a business entity. Advances are alternatively called loans. So there are different types of loans/advances. Consumer loan which is given to individual and commercial loans which are given to businesses entity. Common types of consumer loan are Auto loan (a loan for the purchase of the vehicle), Personal Loan ( an amount as per demand/eligibility is given to an individual, then he/she return in equal monthly installment & this installment include principal and markup payments and it is sometimes called advance against salary), Agriculture loan which is given to farmers to purchase of inputs which are used for cultivation or to purchase of agriculture machinery. To tenure of the loan, there are commonly two types of loans one is the short-term loan. Short Term Loan has a tenure of one year and less than one year. Long Term Loan which is sometimes called demand Finance has a tenure of more than one year. There are also two types of loans, funded and non-funding but in this variable only funded are added up. In Islamic Banking, products of advances are different. Islamic banks did not give cash/funds directly to the businessman. Islamic Banks buy goods from a supplier and then sell them to their customer at deferred payment after including margin in goods prices. For house/car loan, Islamic Bank charge rental. In the balance sheet, the consolidated figure of advances is written which are outstanding as of date.

#### **3.3.2 INVESTMENT:**

Investment is an important component of the balance sheet of a bank on its asset side. Bank generates income in the form of markup from Investment. Bank used to invest in Government

Security, Treasury Bills, Bonds, and in shares of different companies. Investment in Government security is safe and there is no risk of default and resultantly banks did not have to create provisioning. So banks prefer to make heavy investments in government security and therefore the volume of investment in the balance sheet of a bank is almost equal to the volume of gross advances, sometimes it surpasses advance figures. Banks earn income in the form of markup/profit over these investments. State Bank of Pakistan also utilizes the sale/purchase of Treasury Bills to control the money in circulation and to control inflation. Islamic Banks invest in shares, Islamic Bond, etc. Banks separately mention total investment as on date in their balance sheet of the annual report. The investment figure is taken from the balance sheet of banks.

#### **3.3.3 DEPOSIT:**

Deposit is the amount of money which customers of the banks deposited in the bank and they have claim over it. Therefore, deposits are written on the liabilities side of the bank. Deposits are the lifeblood for the bank because they have to lend this money to earn profit and also to pay interest to depositors over saving and fixed deposit. If banks have sufficient deposits then they can lend without worrying. Deposits are in categories of current deposit, saving a deposit, and fixed deposit. Nowadays, Banks are preferring to increase the volume of current account deposits because banks don't pay interest on it.

#### **3.3.4 BORROWING**

When banks have a liquidity shortage than they borrow funds from the State Bank of Pakistan or any commercial banks. State Bank of Pakistan has set maximum limits on loans regarding its deposit it is called advance to deposit ratio. If banks breach this limit or to breach limit then they borrowed money from commercial banks or central banks to overcome this deficiency.

#### **3.3.5 NON PERFORMING LOAN**

Non-Performing Loan is default loans which debtors failed to repay. Every bank has a preference that this part i.e. NPL should be minimum. Regulators directed banks to create provisioning against these loans from the profit of the bank. So NPL has directly decreased the performance/profitability of the banks. NPL.

#### **3.3.6 INFLATION**

Inflation is an overall increase in the prices of goods and services and a decrease in the value of money. There are many reasons for inflation. One of the reasons is that there is more money in the market added through the purchase of treasury bills/bonds by the Government/Central Bank or more loans disbursed by Commercial Banks. Other reasons are demand for goods are high and but supply is low and then prices are increased which resultantly in high inflation. Sometimes prices of raw material are increased and then the cost of the good is increased. This is called cost pull inflation. There are different ways to measure inflation.

#### **3.4.7 GROSS DOMESTIC PRODUCT RATE:**

Gross Domestic product is all the goods and services produced within a country either by their people or foreigners residing in that country. Gross Domestic Product Rate = (Gross Domestic Product of Current Year – Gross Domestic Product of Previous year) / Gross Domestic Product of Previous Year. If Gross Domestic Product Rate is higher from the previous year mean more goods and service are produced in the country and more banking channel are used either for a deposit or Advances. So Gross Domestic Product rate has a positive impact on bank performance

#### **3.3.8 POLICY RATE (TARGET RATE)**

Policy Rate (Target Rate) is the rate used by the State Bank of Pakistan to implement its monetary policy to achieve Macroeconomic Indicators. State Bank of Pakistan announces policy rate quarterly. In this research, I have annualized it by taking its average of four quarters policy rate of a specific year. State Bank of Pakistan through Reverse Repo with ceiling rate which is currently 50 bps (i.e. 0.50%) above the target rate & through Repo with floor rate which is currently 150 bps(i.e. 1.50%) below the State Bank of Pakistan Policy rate, controls the liquidity of banks and inflation. This policy Rate also sets a base for KIBOR (Karachi Interbank Offer Rate) in which banks lend money to those who need it. Pricing of every loan is KIBOR based either it is Islamic Bank or Conventional Bank. So fluctuation of Policy rate has an impact on Bank Performance.

#### **3.3.9 BANK PERFORMANCE:**

Bank performance will be measured with three variables i.e. Return on Assets, Return on Equity, and Earnings per Share.

#### 3.3.9.1 RETURN ON ASSETS:

Return on Asset (ROA) = Net profit after tax/total asset. It's mean against one rupee of the asset, how much profit is generated. Return on assets is a monetary ratio that depicts fraction of profit, a company usually earns in relation to its overall resources or assets. It is most usually defined as net income divided by total assets. Net income is usually taken from the income statement of an organization. The assets are normally taken read from the balance sheet and these usually include current as well as non-current assets. (Juan. & Martinez-Solano, 2007).

#### 3.3.9.2 Return on Equity:

Return on equity (ROE) = Net profit after tax/Shareholders Equity. It measures on one rupee of shareholder equity, how much profit is earned on that equity. In finance literature, the return on equity is a measure of the profitability of an organization, in relation to the shareholder's equity, ROE is a measure which shows that of how well an organization consumes investments to produce earnings (Juan, & Martinez-Solano, 2007).

#### 3.3.9.3 EARNINGS PER SHARE

Earnings per share (EPS) = (Net Profit-Preferred Dividend) / Weighted Average Share Outstanding. The term earnings per share (EPS) represents the portion of a company's earnings, net of taxes and preferred stock dividends, that is allocated to each share of common stock. The figure can be calculated simply by dividing net income earned in a given reporting period (usually quarterly or annually) by the total number of shares outstanding during the same term. Because the number of shares outstanding can fluctuate, a weighted average is typically used (Besely 2006, P.20) calculated as: ('Earning per share' n.d).

### **3.4 CONCEPTUAL FRAMEWORK.**

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### **3.5 MODEL SPECIFICATION:**

 $\mathbf{Y} = \beta \mathbf{0} + \beta \mathbf{1} \mathbf{X} \mathbf{1} + \beta \mathbf{2} \mathbf{X} \mathbf{2} + \beta \mathbf{3} \mathbf{X} \mathbf{3} + \beta \mathbf{4} \mathbf{X} \mathbf{4} + \beta \mathbf{5} \mathbf{X} \mathbf{5} + \beta \mathbf{6} \mathbf{X} \mathbf{6} + \beta \mathbf{7} \mathbf{X} \mathbf{7} + \beta \mathbf{8} \mathbf{X} \mathbf{8} + \varepsilon$ 

# **Y** = Bank Performance = EPS, ROE, ROA

### X1 = Advances

### X2 = Investment

**X3** = Non-Performing Loan

X4 = Deposit
X5 = Borrowing
X6= Inflation
X7 = Stat Bank of Pakistan Policy Rate
X8 = Gross Domestic Product Rate

# **3.6 RESEARCH HYPOTHESIS:**

H1: Advances have a significant impact on Bank Performance.

H2: Investment has significant has a significant impact on Bank Performance.

H3: Non-Performing Loan has a significant impact on Bank Performance

H4: Deposit has a significant impact on Bank Performance.

**H5:** Borrowing has a significant impact on Bank Performance.

H6: Inflation has a significant impact on Bank Performance.

H7: SBP Policy rate has a significant impact on Bank Performance.

H8: Gross Domestic Product has a positive impact on Bank Performance.

### 3.7 Population of Study:

Commercial Banks Listed on Pakistan Stock Exchange is the population of this study. There are 34 commercial banks which include 9 public sector banks operating in Pakistan as per State Bank of Pakistan data for the year 2018. Out of 32 commercial banks, 20 commercial banks are listed at Pakistan Stock Exchange.

# **3.8 SAMPLE SIZE**

(Florida University. 1991) There are several approaches to determining the sample size. These include using a census for smallpopulations, imitating a sample size of similar studies, using published tables, and applying formulas to calculate a sample size. The sample size is 9 major commercial banks date including five big banks are used for this research. These sample

size represent more than 80% of the population (total commercial banks of Pakistan listed at Pakistan Stock Exchange). Name of these banks are as follows:

- 1. National Bank of Pakistan Limited.
- 2. MCB Bank Limited
- 3. Habib Bank Limited
- 4. UBL Bank Limited
- 5. Allied Bank Limited
- 6. Meezan Bank Limited
- 7. Bank Alfalah Limited
- 8. Bank Al Habib Limited
- 9. The Bank of Punjab

# **3.9 DATA SOURCE:**

Data of internal factors is extracted from the Annual Reports of the banks. Annual Reports from the year 2013 to the year 2018 of all these nine banks are available on their website. Data of External factor i.e. Policy Rate & GDP rate is extracted from the SBP website and data of inflation is extracted from the website of Bearue of Statistics. Frequency of data is annual.

# 3.10 Equipment and Software:

Quantitative data against each variable is extracted from annual reports of the bank and is recorded in tabular format using Microsoft Excel. Analysis of data is executed on EViews software.

# **3.11 TYPE OF DATA**

Quantitative Panel data is used in this research.

# **3.11 PANEL DATA**

Panel data is defined as a collection of variables across numerous individuals that are collected over different intervals (Erica-2019). Panel data Example of the individual group can be banks, companies, countries, people, etc. Panel data is a combination of time series data and cross-section data. Time series data show the value of a variable over some time. In cross-section, there is no time component but data of cross-section on a particular single period. Panel data have the feature

of cross-section component and time series component. Cross-section data is repeated for a different period with the change of its value.

Panel data is a combination of cross-section data and time-series data.

### **3.11.1 Advantages of Panel Data:**

Panel data is a combination of cross-section data and time-series data. The advantages of panel data are as follow:

- The data contains both time series and cross-section, so that is the reason for getting the best-estimated results as different cross-section units and different periods.
- The selection of different cross-sections like companies listed in the stock exchange with different periods gives the large sample size and due to the larger sample size, the results are best as compared to the results of cross-section and time-series data.
- There is an ease of omission of variables in the panel data irrespective of time series data and cross-section data which makes the results unbiased.

### 3.11.2 Disadvantages of Panel Data:

Here are some disadvantages of panel data which are as follow:

- Panel data do not give unbiased results when the assumption of pooling is not correct.
- Panel data assume that the sample size should be large. If this assumption of large sample size is not fulfilled, as the period of selected countries is small, then the results will give us a false estimation and we can face the problem of biased results.

### **3.11.3 BALANCED PANEL DATA:**

Balanced Panel data is a dataset in which each variable is being observed every year which resulted that a total number of observations of are equal to  $n = N \times T$  where N is variables in the dataset and T is time.

### **3.11.4 UNBALANCED PANEL DATA**

Unbalanced Panel Data is a dataset in which at least one variable is not observed each year which that total observation are less than n i.e.  $n = N \times T$  where N is the number of variables in data while T is time (years).

# **3.12 MEASUREMENT OF VARIABLES:**

Definition of the Variables							
Variables	Measurement						
Dependent Variable							
Firm Performance Return on	ROA, ROE, EPS						
Assets(ROA) Return on Equity	Profit after taxes / total assets x 100						
(ROE) Earning Per Share (	Profit after taxes / stockholders equity x 100						
EPS)	Profit after Tax /Weighted Average No. Of Ordinary Shares x 100						
Independent Variables	5						
Advances	Advances / Total Assets x 100						
Investments	Investments / Total Assets x 100						
NPL	Non Performing Loans / Gross Advances x 100						
Deposit	Total Deposit / Total Assets x 100						
Borrowings	Borrowings / Total Assets x 100						
	Price Index in Current Year – Price Index in Previous Year / Price Index Previous						
Inflation	Year						
GDP	(GDP in current Year - GDP in previous year) / GDP in Previous Year x 100						
Policy Rat	(Policy rate of Q1 + Policy rate of Q2 + Policy Rate of Q3 + Policy Rate Q4) / 4						

Elisa Menicucci, Guido Paolucci, (2016) "The determinants of bank profitability: empirical evidence

from European banking sector", has used proxies for calculation of dependent variabels and same are used for in this study for calculation of Advancess, Deposit, Investments and Borrowings.

# **CHAPTER 4 EMPIRICAL RESULT**

# **4.1 INTRODUCTION**

In this chapter, data is executed on Eviews (statistical software for data analysis) and its empirical result is extracted using different models and then results are discussed in details

# **4.2 SUMMARY OF STATISTICS**

### TABLE NO. 4.1

### **DESCRIPTIVE STATISTICS**

	ADV	INV	NPL	DPT	BRN	PR	INF	GDP	ROE	EPS	ROA
Mean	38.13	43.92	8.30	78.61	9.83	6.88	5.24	4.53	18.13	10.41	1.25
Median	37.44	46.66	7.02	75.40	9.59	6.92	4.34	4.35	19.18	7.95	1.10
Maximum	54.43	57.21	22.79	168.86	25.22	9.92	8.62	5.50	29.96	24.18	2.78
Minimum	26.99	13.14	1.08	42.91	1.28	3.70	2.86	3.70	(12.37)	(1.62)	(0.51)
Std. Dev.	6.83	10.87	5.23	16.96	5.73	1.95	2.06	0.65	6.44	6.91	0.62
Skewness	0.89	0.89	0.68	1.00	1.50	0.29	0.60	0.29	0.37	0.52	0.37
$\frac{\text{Kurtosis}}{\text{ADV} - \text{Adv}}$	3.58	2.92	2.77	3.04	4.58	1.93	1.80	1.62	3.73	2.03	3.73

ADV = Advances

INV = Investment

NPL = Non-Performing Loan

DPT = Deposit

BRN = Borrowing

INF = Inflation

PR = Policy Rate (Monetary Policy)

GDP = Gross Domestic Product

# **4.3 MEASUREMENT OF MEAN**

The mean of dependent variables are as follows. Mean of Advances is of 38.13, Investment is of 43.92, NPL is of 8.30, Deposit is of 78.61, Borrowing is of 9.83, Policy Rate is of 6.88, GDP is of 4.53, Inflation is of 5.24, The mean of dependent variables are as follows. Mean of ROE is of 18.13, ROA is of 1.25, EPS is of 10.41.

# 4.4 MEASUREMENT OF NORMALITY:

A very important part of any research is Normality assumptions because normally distributed data is always free from errors. However, in research that consists of more than 100 quantitative observations, the parametric test is used (Ghasemi, 2012). According to (Prabhaker Mishra, Chandra M Pandey, Uttam Singh, Anshul Gupta Chinmoy Sahu, and Amit Keshri, 2019), Skewness and kurtosis are the tests to check the data normality.

### Skewness

From the interpreter's point of view: If the skewness is less than -1 or greater than 1, then distribution is at high skewness. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed. If skewness is between -0.5 and 0.5, the distribution is approximately symmetric.

### Kurtosis

Kurtosis can reach values from 1 to positive infinite.

Meso kurtic: Normal distribution kurtosis = 3. Usually, the normal distribution of the data is not their it lies between the +1 to 3.

On the other hand, if the kurtosis is greater than 3then is heavy-tailed then it let to flatter approaching normal distribution, but this situation is known as leptokurtic.

For normal distribution in kurtosis the values should be between +1 to 3.

#### Table 4.2

#### **Normality Test**

	Skewness	Kurtosis
ROA	0.37	3.73
ROE	0.52	2.03
EPS	0.42	3.46
ADV	0.89	3.58
ADV	0.89	3.58
INVST	0.73	2.92
DPT	1.00	2.77
BR	0.80	3.04
NPL	0.29	4.58
INF	0.60	1.93
GDP	0.35	1.80
PR	0.47	1.62

Note: (ROA= Return on Assets, ROA= Return on Equity, EPS = Earnings per share, ADV= Advaces, INVST= Investment, DPT= Deposoit, BR= Borrowing, NPL= Non Performing Loan, INF= Inflation, GDP = Gross Domestic Product, PR = Policy Rate)

In the light of the table data taken in the empirical research is showing the normality in the light of skewness and kurtosis test. Observing the results of the skewness all the variables are near to the normality as values are lying between 0 to  $\pm 0.5$ , but the values of variables are lying between the  $\pm 0.5$  to  $\pm 1$ , showing moderate skewness. So, the data in the empirical test is moderately skewed showing the impact of normality.

In the light of test of kurtosis data taken in the empirical research is showing the normality as the kurtosis values for all variables are showing Meso kurtic effect which means that the data is approximately symmetric, in contrast only the kurtic value of ROA is >3 showing the leptokurtic notion but the data is fatter at tailed hence values of ROA are also near to normal.

Hence, in the view point of skewness and kurtosis the data in the empirical research is showing the approximately symmetric or normal distribution.

# 4.5 Multicollinearity among independent Variables:

TABL	ΕN	<b>O</b> .	4.3
------	----	------------	-----

	ADV	INV	NPL	DPT	BRN	INF	PR	GDP
ADV	1							
INV	0.01124	1						
NPL	0.03032	0.02088	1					
DPT	0.05119	0.05123	0.02896	1				
BRN	0.05333	0.05027	-0.03656	0.05198	1			
				-				
INF	-0.03277	-0.02705	0.01239	0.022491	-0.04132	1		
PR	0.01378	0.046758	0.024841	0.012152	-0.01471	0.05263	1	
							-	
GDP	0.04501	0.030575	-0.02115	0.02955	0.05356	-0.051712	0.050669	1

In description of the results of Table 4.3 that is correlation matrix for the check of the multi collinearity in the variables. In the light of the matrix that there is no multi collinearity in the variables used in the empirical research.

# **4.6 AUTO-CORRELATION**

(M. L. KING, 1981) analyzed the first autoregressive regression disturbance for moving average disturbances in the data.

To check auto correlation, Durbin Watson test is applied which have,

Ho: p = 0Ha: p > 0Hb: p < 0
The rejection of null hypothesis means wither the DW-Test values are d>2 is the negative correlation which cannot be solved by the autoregressive model, but if d<2 moving towards positive side then to get the values near to d=2, the applicability of the autoregressive test with one lag period as variable is showing the residual values of the previous years in the current year.

The statistic ranges by Durbin Watson in value from 0 to 4. A value near to 2 directs non-auto correlation, a value towards 0 shows positive auto correlation a value towards 4 specifies negative auto correlation.

In case of this empirical research the Durbin Watson test is applied with first autoregressive lag to remove the moving average disturbance in the data.

In our case the Durbin Watson d' values (autoregressor lag added), for EPS is 2.30, ROA is 1.86, ROE is 2.210 described in (Table 2.4, 5.6, 5.8, 5.10), which shows the DW value near to 2.0 hence the auto correlation is minimum in empirical research model.

## 5.5 MODEL 1 (RETURN ON ASSETS)

ROA = f(Advances, Investment, Non-Performing Loan, Deposit, Borrowing, Inflation, Gross Domestic Product, Policy Rate).

Dependent Variable: ROA

Method: Panel EGLS (Cross-section random effects)

Periods included: 6

Cross-sections included: 9

Total panel (balanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	2.3021	0.8973	2.5656	0.0137
ADV	0.0034	0.0014	2.4515	0.0154
INV	0.0018	0.0008	2.2814	0.0274
NPL	(0.0523)	0.0243	(2.1494)	0.0347
DPT	0.0012	0.0007	1.6796	0.0501
BRN	(0.0025)	0.0012	(2.1005)	0.0362
INF	(0.0399)	0.0455	(0.8775)	0.5665
GDP	0.4352	0.1825	2.3842	0.0173
PR	0.0550	0.0576	0.9556	0.3445
Table No. 4	4.5			
R-squared		0.827274		

0.725456

4.196451

0.000814

1.862569

Table No. 4.4

Adjusted R-squared

Prob(F-statistic)

Durbin-Watson stat

F-statistic

#### Correlated Random Effects - Hausman Test

Test cross-section random effects

#### Table No. 4.6

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Cross-section random	0.000	8	1.	.000

#### **5.5.1 Explanation of Result:**

- The value of the Coefficient of constant is 2.31 and its p-value is 0.0137 which is less than 0.05. It shows some other variables that are significant and explaining Return on assets.
- The value of R squared and Adjusted R Squared is near to 1 so this Model is perfect.
- The value of Durbin Watson Stat is near 2, P-value of F-statistics is less than 5%, so the model is good and its result should be accepted.
- P-value of Advances is 0.0154 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Assets. So we accept the Hypothesis that Advance has a significant impact on bank performance.
- A p-value of Investment is 0.0274 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Assets. So we accept the Hypothesis that Investment has a significant impact on bank performance.
- The P-value of Non-Performing Loan is 0.0347 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Assets. So we accept the Hypothesis that a Non-Performing Loan has a significant impact on bank performance. But the value of its coefficient is in negative which shows when Non-Performing Loan will increases return on an asset will be decreased.
- A p-value of Deposit is 0.0501 which is near to 5%. It shows that this variable is significant and explaining the dependent variable Return on Assets. So we accept the Hypothesis that Deposit has a significant impact on bank performance.
- The P-value of Borrowing is 0.0362 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Assets.

So we accept the Hypothesis that Borrowing has a significant impact on bank performance. But its value is negative which shows when borrowing will increase then return on an asset will decrease.

- P value of Inflation is 0.5665 which is greater than 0.05 (in percentage greater than 5%). It shows that this variable is not significant and does not explain the dependent variable Return on Assets. So we reject the Hypothesis that Inflation has a significant impact on bank performance.
- P-value of Gross Domestic Product is 0.0173 which less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Assets. So we accept the Hypothesis that Gross Domestic Product has a significant impact on bank performance. The coefficient of Gross Domestic Product is positive which shows when the Gross Domestic Product Rate increase then the performance of the bank increases.
- P-value of Policy Rate is 0.3445 which is greater than 0.05 (in percentage greater than 5%). It shows that this variable is not significant and does not explain the dependent variable Return on Assets. So we reject the Hypothesis that Policy Rate has a significant impact on bank performance.

#### 5.5.2 HAUSMAN TEST:

P-value is exactly one therefore random effect test is being applied to this model.

#### **5.6 Model No. 2 ( Return on Equity)**

ROE = f(Advances, Investment, Non-Performing Loan, Deposit, Borrowing, Inflation, Gross Domestic Product, Policy Rate).

Dependent Variable: ROE

Method: Panel EGLS (Cross-section random effects)

Periods included: 6

Cross-sections included: 9

Total panel (balanced) observations: 54rio77621`1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	27.5068	13.6783	2.0110	0.0533
ADV	0.0687	0.0205	3.3479	0.0184
INV	0.0262	0.0106	2.4662	0.0503
NPL	(0.7160)	0.2506	(2.8577)	0.0396
DPT	0.0286	0.0107	2.6593	0.0413
BRN	(0.0497)	0.0168	(2.9513)	0.0310
INF	(1.8839)	0.6727	(2.8005)	0.0328
GDP	7.5032	2.7123	2.7663	0.0432
PR	0.7173	0.7782	0.9218	0.3616

Table No. 4.7

#### Table No. 4.8

Dermand	0.925250
R-squared	0.835259
Adjusted R-squared	0.699305
Aujusicu K-squareu	0.079303
F-statistic	1.730432
1 Statistic	1.750152
Prob(F-statistic)	0.117384
Durbin-Watson stat	2.277457

## Correlated Random Effects - Hausman Test

Test cross-section random effects

#### Table No. 4.9

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000	8	1.000

#### 5.6.1 Explanation of Result:

- The value of the Coefficient of constant is 27.5068 and its p-value is 0. 0533 which is approximately near to 5%. It shows some other variables that are significant and explaining Return on Equity.
- The value of R squared and Adjusted R Squared is near to 1 so this Model is perfect.
- The value of Durbin Watson Stat is near 2, P-value of F-statistics is less than 5%, so the model is good and its result should be accepted.
- P-value of Advances is 0.0184 which less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Equity. So we accept the Hypothesis that Advance has a significant impact on bank performance.
- P-value of Investment is 0. 0.0503 which is approximately near to 5%. It shows that this variable is significant and explaining the dependent variable Return on Equity. So we accept the Hypothesis that Investment has a significant impact on bank performance.
- P-value of Non-Performing Loan is 0.0396 which less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Equity. So we accept the Hypothesis that a Non-Performing Loan has a significant impact on bank performance. But the value of its coefficient is negative which shows when Non-Performing Loan will increase return on Equity will be decreased.
- P-value of Deposit is 0.0413 which shows that this variable is significant and explaining the dependent variable Return on Equity. So we accept the Hypothesis that Deposit has a significant impact on bank performance.

- The P-value of Borrowing is 0.0310 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Assets. So we accept the Hypothesis that Borrowing has a significant impact on bank performance. But its value is negative which shows when borrowing will increase then return on an asset will decrease.
- The P-value of Inflation is 0.0396 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Equity. So we accept the Hypothesis that Inflation has a significant impact on bank performance. But the value of its coefficient is negative which shows when Non-Performing Loan will increase return on Equity will be decreased.
- The P-value of Gross Domestic Product is 0.0432 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Return on Equity. So we accept the Hypothesis that Gross Domestic Product has a significant impact on bank performance. The coefficient of Gross Domestic Product is positive which shows when the Gross Domestic Product Rate increase then the performance of the bank increases.
- The P-value of Policy Rate is 0.3616 which is greater than 0.05 (in percentage greater than 5%). It shows that this variable is not significant and does not explain the dependent variable Return on Equity. So we reject the Hypothesis that Policy Rate has a significant impact on bank performance.

#### 5.6.2 HAUSMAN TEST:

P-value is exactly one therefore random effect test is being applied to this model.

## 5.7 MODEL NO. 3 (EARNING PER SHARE)

EPS = f(Advances, Investment, Non-Performing Loan, Deposit, Borrowing, Inflation, Gross Domestic Product, Policy Rate).

Dependent Variable: EPS

Method: Panel EGLS (Cross-section random effects)

Periods included: 6

## Cross-sections included: 9

Total panel (balanced) observations: 54

### Table No. 4.10

Variable	Coefficient	Std. Error	t-Statistic	Prob.	
С	12.0521	8.1738	1.4745	0.0503	
ADV	(0.0309)	0.0125	(2.4675)	0.0249	
INV	0.0121	0.0074	1.6243	0.0489	
NPL	(0.4491)	0.2495	(1.7996)	0.0391	
DPT	0.0137	0.0065	2.1173	0.0278	
BRN	(0.0305)	0.0110	(2.7693)	0.0236	
INF	(0.9132)	0.4088	(2.2339)	0.0263	
GDP	2.5846	1.7023	1.5183	0.0505	
PR	0.4261	0.5267	0.8089	0.4228	
Table No. 4.1	11				
R-squared		0.980901			
Adjusted R-squared		0.853062			
F-statistic			3.019965		
Prob(F-statistic)			0.045578		
Durbin-Watson stat			1.875433		

## Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

#### Table No. 4.12

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000	8	1.000

#### 5.7.1 EXPLANATION OF RESULTS

- The value of the Coefficient of constant is 12.0521 and its p-value is 0.0503 which is approximately near to 5%. It shows some other variables that are significant and explaining Earning Per Share.
- The value of R squared and Adjusted R Squared is near to 1 so this Model is perfect.
- The value of Durbin Watson Stat is near 2, P-value of F-statistics is less than 5%, so the model is good and its result should be accepted.
- P-value of Advances is 0.0249 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Earning Per Share. So we accept the Hypothesis that Advance has a significant impact on bank performance.
- The P-value of Investment is 0.0489 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Earning Per Share. So we accept the Hypothesis that Investment has a significant impact on bank performance.
- P-value of a Non-Performing Loan is 0.0391 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Earning Per Share. So we accept the Hypothesis that a Non-Performing Loan has a significant impact on bank performance. But the value of its coefficient is negative which shows when Non-Performing Loan will increase return on an asset will be decreased.
- P-value of Deposit is 0.0278 which shows that this variable is significant and explaining the dependent variable Earning Per Share. So we accept the Hypothesis that Deposit has a significant impact on bank performance.
- The P-value of Borrowing is 0.0236 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Earning Per Share. So we accept the Hypothesis that Borrowing has a significant impact on bank performance.

But its value is negative which shows when borrowing will increase then return on an asset will decrease.

- The P-value of Inflation is 0.0263 which is less than 0.05 (in percentage less than 5%). It shows that this variable is significant and explaining the dependent variable Earning Per Share. So we accept the Hypothesis that Inflation has a significant impact on bank performance. But the value of its coefficient is negative which shows when Non-Performing Loan will increase return on Equity will be decreased.
- P-value of Gross Domestic Product is 0.0505 which is approximately near to 5%. It shows that this variable is significant and explaining the dependent variable Earning Per share. So we accept the Hypothesis that Gross Domestic Product has a significant impact on bank performance. The coefficient of Gross Domestic Product is positive which shows when the Gross Domestic Product Rate increase then the performance of the bank increases.
- P-value of Policy Rate is 0.4228 which is greater than 0.05 (in percentage greater than 5%). It shows that this variable is not significant and does not explain the dependent variable Earning Per Share. So we reject the Hypothesis that Policy Rate has a significant impact on bank performance.

#### 5.7.2 HAUSMAN TEST:

P-value is exactly one therefore random effect test is being applied to this model.

# CHAPTER 5 DISCUSSION, SUMMARY, FUTURE IMPLICATION, AND RECOMMENDATION

### **5.1 INTRODUCTION**

This chapter includes a discussion, summary, future implication, and recommendation.

#### **5.2 DISCUSSION**

(Juliana Bonomi Santos, Luiz Artur Ledur Brito, 2012) According to them the banks's performance is determined through number of factors but the internal factors which are having impact on the bank's performance are the profitability indicators. Profitability indicator is actually the measure of the bank' subjective performance which is very important and the profitability is measured by ROA, ROE and EPS. These three indicators are used in the empirical research so that firm's performance can be indicated. In the view point of regression analysis, the independent variables (ADV, INVST, DPT, BR, INF, PR, GDP) are defining the RAO, ROE and EPS with significance and has impact on these indicators. After reviewing the empirical results, which were obtained after applying the random effect test of panel data. There are eight independent variables which include five internal i.e. Advances(Loans), Investment, Non-Performing Laon, Deposit, Borrowing, and three external factors i.e. Inflation, Gross Domestic Product, and the State Bank of Pakistan Policy Rate. Panel date of all these eight variables is summarized for six years from 2013 to 2018 & for Bank Performance, three dependent variables are selected i.e. Return on Assets, Return on Equity, and Earning Per Share. Empirical results are obtained from three models using a random effect test which is executed on E-Views. In the first model, return on assets is taken as a dependent variable, in the 2<sup>nd</sup> model Return on Equity is taken as dependent variables. In the last model Earning per Share is taken dependent variables.

- Empirical Results of all three models show Advances is a significant variable because its pvalue is less than 5% in all three models and its coefficient is positive. So we accept the hypothesis that Advances have a significant impact on bank performance.
- Empirical Results of all three models show Investment is a significant variable because its pvalue is less than 5% in all three models and its coefficient is positive. So we accept the hypothesis that Investment has a significant impact on bank performance.

- Empirical Results of all three show Non-Performance Loan is significant because its p-value is less than 5% in all three models and but its coefficient is negative. So we accept the hypothesis that a Non-Performing Loan has a significant impact on bank performance.
- Empirical Results of all three models show deposit is a significant variable because its p-value is less than or equal to 5% in all three models and its coefficient is positive. So we accept the hypothesis that Deposit has a significant impact on bank performance.
- Empirical Results of all three models show borrowing is a significant variable because its pvalue is less than or equal to 5% in all three models and but its coefficient is negative. So we accept the hypothesis that Borrowing has a significant impact on bank performance.
- So we accept the hypothesis that Deposit has a significant impact on bank performance.
- Empirical Results of all three models show inflation is not a significant variable because its pvalue is greater than 5% in all three models. So we reject the hypothesis that Inflation has a significant impact on bank performance.
- Empirical Results of all three models show SBP policy rate is not a significant variable because its p-value is greater than 5% in all three models. So we reject the hypothesis that the SBP policy rate has a significant impact on bank performance.
- Empirical Results of all three models show GDP is a significant variable because its p-value is less than or equal to 5% in all three models so we accept the hypothesis that GDP has a significant impact on bank performance.

## **5.3 SUMMARY**

The Banking industry is the backbone of the economy of a country. In Pakistan, the Banking industry is playing an important role to run and support the economy & government functionaries. There are thirty-four commercial banks as per State Bank of Pakistan Data 2018. Out of these thirty-four commercial banks, twenty banks are listed on Pakistan Stock Exchange. The population of this research is Commercial banks listed on Pakistan Stock Exchange. The sample size is nine banks i.e. National Bank of Pakistan, MCB Bank, United Bank Limited, HBL, Allied Bank Limited, Meezan Bank Limited, Bank Alfalal Limited, Bank Al Habib Limited, and The Bank of Punjab. Many factors influence the performance of banks. Some are internal factors and some are external factors. In this research, I have discussed five internal factors and three external factors. Internal factors are related to core functions of banks i.e. Advances (Loans), Investments, Non-

Performing loans, deposits, Borrowing, Banks, and external factors are inflation, Gross Domestic Product, State Bank of Pakistan Policy rate. I have taken data for the last six years from the audited annual accounts of these nine banks which are published in their annual reports and these annual reports are available on the website of respective banks. Panel data is used in this research. Data is extracted from annual report reports of the banks. Then the impact of these independent variables (internal factors and external factors) is checked on bank performance. For bank performance, three dependent are considered i.e. Return on Assets, Return on Equity, and Earning per Share. Data is executed on EViews (statistical software used for data analysis). Random Effect is applied. Advances have a positive impact on bank performance. Investment has also a positive impact on bank performance. It shows when advances & Investment increases then bank performance will also increase. But Non-Performing Loan hurts bank performance because its coefficient is negative. It means when Non-performing loan increases then bank performance decreases. The deposit has a positive impact on bank performance but borrowing has a negative impact on bank performance. Inflation and the State Bank of Pakistan Policy rate are not significant and do not have any impact on bank performance. Gross Domestic Product has a positive impact on bank performance. When the GDP rate increases then bank performance also increases.

#### **5.4 FUTURE IMPLICATION**

In this research only commercial banks of Pakistan that are listed on the Pakistan Stock Exchange are taken as population, this research could also be implicated/replicated on all Commercial Banks operating under the State Bank of Pakistan. To check/validate further, this research could also be implicated/replicated on commercial banks of other countries.

In this research, we have taken standalone independent variable e.g. Advances(loans) but if a bank A has more advances but spread/pricing is very low as compared to a bank B who have a lesser volume of advances but spread/pricing is high then Bank B is earning more interest/profit on loans. For future study, we may adjust independently accordingly. This research can also base on the student of management sciences who want to adopt/conduct their research on the banking industry of Pakistan or the banking industry of any other country. This research can also helpful for an investor who wants to invest in the Banking Industry.

## **5.4 IMPLICATION OF STUDY**

After conducting research on impact of internal and external factors on commercial banks of Pakistan listed on Pakistan Stock Exchange. I would like to make the following recommendations.

- Banks Should enhance volume of Advances (loans) are source of the income for banks and liquidity for individual or business who need. So Bank should enhance the volume of loans with a good spread/pricing over these loans.
- 2. Bank should enhance the volume of Investment, investment in T bills, Bonds backed by government are secure so banks should maintain balance between investment and Advances. Because if banks make more investment in government securities than less amount will be available for loan disbursement to private sector and resultantly it will badly effect the economy of a country.
- 3. Banks should reduce the Non Performing Loans and Non Performance Loans to Advance should be minimum. Ideally it must be low the industry ratio of Non Performance Loan to Gross Advances ratio. In model, Coefficient of Non Performing Loan Ratio is negative which mean when NPL ratio increases than bank performance will decreases.
- Bank should do more for uplift the economy and to increase the Gross Domestic Product. When GDP increase then performance of the banks will increase.
- 5. Banks should make focus to increase the volume of deposit. When more funds are available then banks will disburse more advances (loans) & investment and will earn more interest profit. Resultantly performance of the banks will improve. If banks have more deposit but they did not disburse loans and make investment then this deposit will become burden for banks because banks are paying interest/profit on this deposit. Bank should also prefer to increase the share the current account deposit from total deposit. Banks did not pay interest on current accounts deposit and so it will be free of cost and banks are paying only administrative cost on this current account deposit.
- 6. Banks should avoid borrowing from other banks and preferably generate liquidity by raising their own deposit.

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