

**EXTERNAL FACTORS THAT EFFECT THE BANKING  
PERFORMANCE: A COMPARISON OF INTERNAL AND EXTERNAL  
FACTORS OF COMMERCIAL BANKS IN PAKISTAN**

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performance.**

**Abstract:**

This study investigates the impact of external factors on commercial bank performance listed on Pakistan Stock Exchange and also we make the comparison of both internal and external factors. 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, are also concern of our study. Panel data of five years from 2013 to 2018 for internal and external factors is collected. Data for external factors i.e. data for inflation is collected from bureau of statistics, data for policy rate is collected from monetary policy and data for GDP is

taken from State Bank of Pakistan. Balanced Panel data is used for empirical study, 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 Hausmann 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 GDP has positive impact on bank performance while NPL has negative impact bank performance. Policy rate have no impact on bank performance.

### **Introduction:**

The bank: an institution that deals with monetary 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 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.

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 financial 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. (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 profitability. 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.

The study aimed to find out the impact of the 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, external factors that influence commercial bank's performance in Pakistan were analyzed. 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 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.

This study aimed to analyze the impact of 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. For the present study following research questions were developed:

1. What is the impact of NPLs on Bank Performance?
2. What is the impact of Inflation on Bank Performance?
3. What is the impact of Gross Domestic Product on Bank Performance?
4. What is the impact of Policy Rate on Bank Performance?

### **Literature Review and Hypothesis Development:**

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 through 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 economic 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.

### **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.

### **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.

Molyneux 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 to 1989. Further, Demirguq-Kunt and Huizinga (1999) underscored both internal and external factors of profitability of 80 countries' banks for 1988 to 1995. 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 instigated 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 Demircug-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.

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 growthrate. 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. On the basis of previous literature we developed the following hypothesis,

**H1:** Non-Performing Loan has a significant impact on Bank Performance

**H2:** Inflation has a significant impact on Bank Performance.

**H3:** SBP Policy rate has a significant impact on Bank Performance.

**H4:** Gross Domestic Product has a positive impact on Bank Performance.

### **Methodology:**

#### **Data Collection and Samples:**

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.

(Florida University. 1991) There are several approaches to determining the sample size. These include using a census for small populations, 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

Data of internal factors ( we include the NPL) 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.

It has been 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 our research, we have discussed and made theoretical and empirical reviews of internal and external factors on bank's performance.

The purpose of this study 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.

- Non-performing loan
- Inflation
- State Bank of Pakistan Policy Rate
- Gross Domestic Product

#### **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.

#### **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.

#### **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 =  $(\text{Gross Domestic Product of Current Year} - \text{Gross Domestic Product of Previous year}) / \text{Gross Domestic Product of Previous Year}$ . 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

**Policy Rate (Target Rate)**

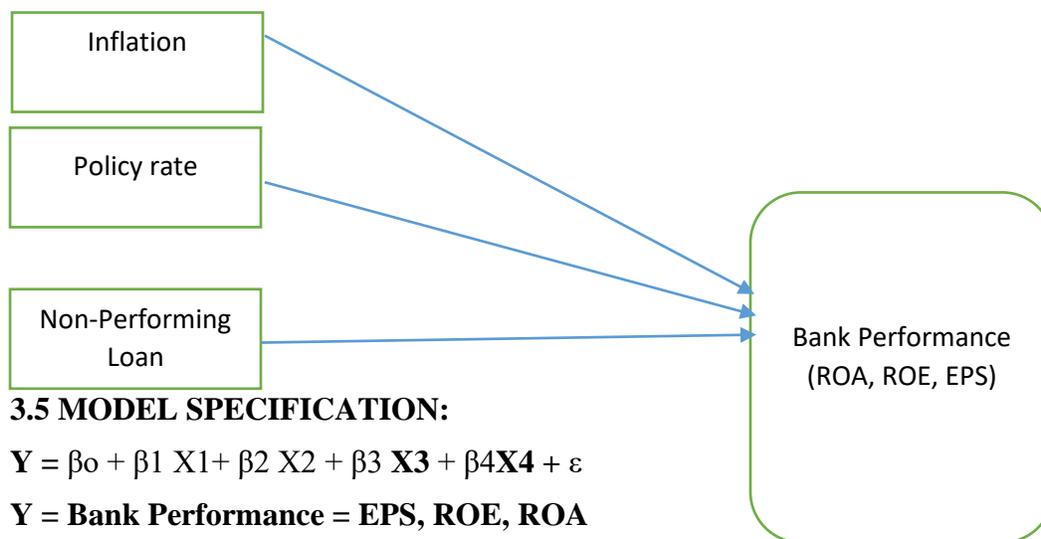
Policy Rate (Target Rate) is the rate used by the State Bank of Pakistan to implement its monetary policy to achieve Macroeconomic Indicators. State Bank of Pakistan announces policy rate quarterly. In this research, I have annualized it by taking its average of four quarters policy rate of a specific 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 setsa 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.

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

**CONCEPTUAL FRAMEWORK:**

**IVs**

**DV**



**3.5 MODEL SPECIFICATION:**

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

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

**X1 = Non-Performing Loan**

**X2= Inflation**

**X3 = Stat Bank of Pakistan Policy Rate**

**X4 = Gross Domestic Product Rate**

**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.

**4.0 Results and findings:**

Table 4.1  
 Descriptive statistics of the samples

	NPL	PR	INF	GDP	ROE	EPS	ROA
Mean	8.30	6.88	5.24	4.53	18.13	10.41	1.25
Median	7.02	6.92	4.34	4.35	19.18	7.95	1.10
Maximum	22.79	9.92	8.62	5.50	29.96	24.18	2.78
Minimum	1.08	3.70	2.86	3.70	(12.37)	(1.62)	(0.51)
Std. Dev.	5.23	1.95	2.06	0.65	6.44	6.91	0.62
Skewness	0.68	0.29	0.60	0.29	0.37	0.52	0.37
Kurtosis	2.77	1.93	1.80	1.62	3.73	2.03	3.73

NPL = Non-Performing Loan, INF = Inflation, PR = Policy Rate (Monetary Policy), GDP = Gross Domestic Product

The mean of dependent variables are as follows. NPL is of 8.30, 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.

#### Corelations of the variables

Table 4.2  
 Corelations of the samples variables

	NPL	INF	PR	GDP
NPL	1			
INF	0.01239	1		
PR	0.024841	0.05263	1	
GDP	-0.02115	-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.

#### RETURN ON ASSETS:

Table 4.3  
 Return on Assest used a Dependent

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.3021	0.8973	2.5656	0.0137

NPL	(0.0523)	0.0243	(2.1494)	0.0347
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

The result of the random effect model are given in table 4.3 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. 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.

**Return on Equity:**

Table 4.4  
Return on equity taken as dependent.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	27.5068	13.6783	2.0110	0.0533
NPL	(0.7160)	0.2506	(2.8577)	0.0396
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

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. 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.

**Earning Per Share:**

Table 4.5  
EPS taken as dependent

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12.0521	8.1738	1.4745	0.0503
NPL	(0.4491)	0.2495	(1.7996)	0.0391
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

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. 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.

**Discussion:**

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 in the previous research on the same data variance 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. Our research has some future research suggestions on taking different economical indicators more for further research.

### **Further Recommendations/Suggestions:**

Following Recommendations:

1. 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.
4. 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.

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