

# Impacts of Inflationary Trends on Banks' Performance (Large Banks Segment) in Pakistan

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## Abstract

Inflation is an economic period in which prices raised interest rate increases and affects some businesses positively and some negatively. This paper examines the overall Inflationary trends that have great influence on the performance of the large banking segment of Pakistan. This study is directed to verify the impact of inflationary trends on the top rated banks in Pakistan and return on assets (ROA), return on equity (ROE) and net interest margin as key performance indicators of banking sectors are selected as variable. Researchers calculate the figures of these variables and then discuss these figures with bank representatives. The research sample consists of large banks in Bahawalpur district. Through discussion and calculated results, a strong positive relation has found among the variables, i.e. inflation over bank's performance. The limitation of the study is that data of limited years have been taken the due to the unavailability of data and time constraint as well as only banks of Bahawalpur district considered.

**Keywords:** Inflation, banking sector, financial performance

## 1. Introduction

Inflation is a supported build in the normal cost of all merchandise and administrations processed in an economy. Money loses buying force throughout inflationary periods since every unit of money purchases dynamically fewer merchandise. Swelling is an ascent in the general value level. There are two real reasons for expansion: Demand change, and supply change. Powerless and vacillating recuperation needs is a great solid dosage of swelling published ahead of time by the Fed/Treasury. The thinking behind that solution is that expansion and the desire of swelling might actuate organizations sitting on crowds of money and families attempting to shore up their asset reports to begin using some of their money on ventures and shopper durables instead of watch the money devalue. Additionally, climbing costs, and the desire of climbing costs, might energize organizations, hesitant to grow yield and livelihood as a result of deficient interest, to do only that in the desire that costs might climb sufficiently to permit them to offer the included yield at a benefit.

Since renegotiation has not ended up being functional, the main other strategy for fulfilling the objective of diminishing the unsustainable load of home loan obligation might be for an outside gathering to force a diminishment in the quality of the obligation and regularly scheduled installments blocking any understanding by the gatherings. One approach to do that might be by the enactment. That choice has gone no place, and is no more even examined. A considerably less difficult and all the more run alternative is expanding. Increasing costs might build money streams and might lessen the load of extraordinary home loan obligation. Banks might be miserable, yet better off, in light of the fact that less abandonment might mean fewer misfortunes and less cost. Even if, as researchers think, costs at the first climb quicker than wages, contract installments are settled, so mortgage holders might probably outpaced the competition regardless of slacking wages.

Individuals regularly expect that expansion is useful for account holders and terrible for loan losses, while flattening is awful for borrowers and handy for leasers. But that holds just if

there are no reaction impacts from swelling and flattening. But when collapse expands the trouble of genuine obligation and lessens the money streams accessible to an administration that obligation, it hurts lenders by making an excessive amount of obligation they hold uncollectable. Similarly, expansion can greatly improve the situation off by diminishing the obligation load and expanding the money streams accessible for obligation administration. At this minute, researchers may well be at a point where banks, particularly banks, have more to increase more from swelling than they might lose. Similarly, the European Union all in all, and even Germany specifically, would likely add much more from an expansion permitting Greece, Portugal, Ireland, Spain and Italy to pay off their bonds into a degree deteriorated euros than from demanding ruinous severity measures that can just prompt the pounding toward oneself of the regular cash and maybe the European Union itself. Perhaps that is a theme for a future post.

Rate of inflation in Pakistan was 7.75% in 2013. It was 11.01% & 13.66%, 10.11%, 17.03% in 2012, 2011, 2010, and 2009 respectively. From 2003 until 2010, the average inflation rate in Pakistan was 10.15% and 25.33% in August of 2008 reported as the highest rate in Pakistan history. Inflation rate refers to common increase in the prices of necessities measured against a standard level of purchasing power. The most well-known measure of Inflation is the CPI, which measures consumer prices, and the GDP deflator.



## 2. Literature Review:

Several economic experts have discovered that countries with great rising prices. Inflation has inadequately huge banking sectors and value marketplaces. This impact reveals that rising prices reduce standard bank loaning to the huge economical industry, which is constant with the view that adequately great amount of rising prices induces economical institutions to ration credit score.

### 2.1 Return On Equity (ROE)

The volume of net earnings returned as a percentage of trader's value. Come back on value actions organizations productivity by revealing how much profit an organization generates with the money traders have invested.

The return on value for banking institutions is a common statistic they use to assess the profits made on the preliminary investment invested. Without a substantial return on this investment, a standard bank may suffer low earnings and be unable to pay for its administrative expenses or other standard costs. The money a standard bank earns from its preliminary investment can also be an aspect of the net earnings gained by the lender. Investors are often quite interested in the return on value for banking institutions. Roe has appeared through the control of standard bank investment and the fact that value is costly and should be reduced. As Admati et al. (2011) argue, this perception is a misconception, and the sole rationality for economizing value is related to the fact that remains, and debt are sponsored, given the existence of down payment insurance and bailout conditions.

The return on value for banking institutions can also be a competitive advantage seen by traders. For example, a huge standard bank with a well - employed investment is often a target for economical commitment by both individuals and other businesses. A standard bank can report its return on value through control reports or other economical commitment tools. This allows stakeholders to learn about the organization and decide whether they should spend or not. Greater economical commitment into a standard bank allows the institution to employ more investment than before and increase its economical profits. All studies and discussion reveals that there is a beneficial connection between investment and return on equity. Rajan (2005) claims, evaluating the true nature of standard bank efficiency is a very complicated task, since it requires disentangling the aspect of the efficiency which is caused by a genuine value creation from the aspect which is the outcome better (and not easily observable) threats. Indeed, higher profits can always be obtained by getting more threats, and if threats are hidden or overlooked, risk-taking may seem value-enhancing as long as threats have not materialized.

## *2.2 Return On Assets (ROA)*

Return on assets (ROA) actions how successful an organization as compared to its complete assets. Actually, it represents how efficiently an organization utilizes its assets. Generally, ROA used to compare companies in the same industry. Everything else being equal, a greater ROA is better, it means that an organization is more effective about using its assets.

One of such parameter is ROA. Come back on assets is an indicator of how successful an organization is compared to its complete assets. It gives a concept of the efficiency of the control in using its assets to generate earnings. Ramadan et al. (2011) analyzed the factors of standard bank efficiency of banking institutions over the 2009-2013 periods. They discovered that only bank-specific factors played a big part in impacting standard bank efficiency in Jordan. In other words, great loaning activities, low credit score threat, effective spending budget and well-capitalized economical institutions are associated with standard bank productivity.

Both rising prices and economic growth (the signs for macroeconomics) was discovered to be adversely insignificant on both return on asset (ROA) and return on equity (ROE) of the banking institutions. Two studies the impact of macroeconomic variables on banking institutions over the long run, productivity data, specifically, the after-tax return on assets gained by economical institutions is considered. Come back on assets is influenced by their credit score risk; the connection between the two is not straightforward. Movements in the return on assets will reflect not just a credit score threat, but the wide range of rising prices, including banks

*a. Net Interest Margin*

Inflation results of the economic system are diverse and can be both good and bad. The side results are however most noticeable and comprise a decrease in the real value of money as well as other monetary variables over time. Consequently, higher rates may discourage economical commitment and savings, and if rising price levels rise quickly, there may be shortages of economical commitment and adversely impact on economical industry.

According to Geetha et al. (2011), economical advocates believe that there are indirect and direct aftermaths of rising prices in every industry of the economic system ranging from forex prices, economical commitment, unemployment, rates, and inventory marketplaces among others. These researchers concluded that rising prices and inventory marketplaces share a very close association, and that the amount of rising prices impacts inventory exchange movements and threat. Al-Timmi et al., (2011) in their study of the consequences of rising prices and interest amount of loan agencies it's also discovered that the macro-economic factors have a damaging and significant impact on economical industry. Lower rates actually can worsen as economical commitment options with decent profits dry up and standard bank remains, which offer some of the lowest profits under normal banking conditions, begin looking attractive. Moreover, Schreft and Smith (1997) explore the concept that financial systems with higher prices of rising prices obviously present less effective marketplaces because of the greater rates that follow great prices of rising prices.

#### *2.4 Banks Performance*

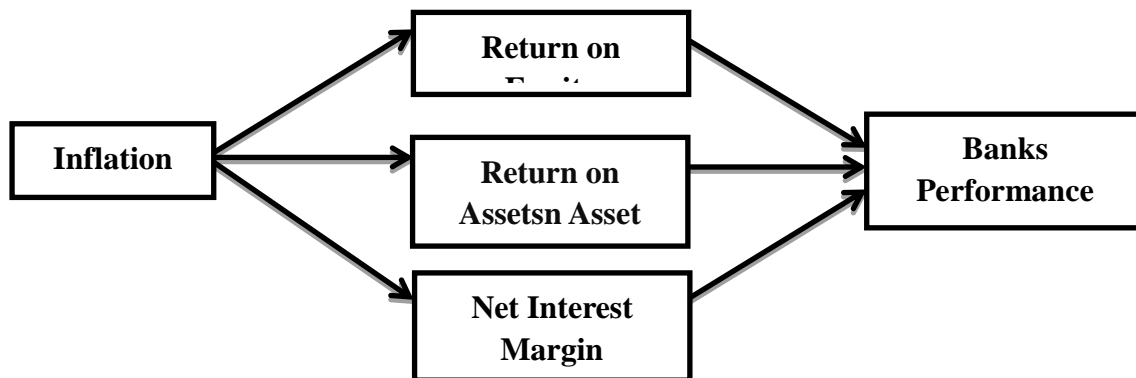
Factors used to measure the performance of banking sector are known as key performance indicators, i.e. profitability, return on assets (ROA), return on equity (ROE), net interest margin, liquidity, etc. An emerging theoretical literature tries to explain the relationship between increase in the inflation rate and its effect on the effective resource allocation of banking sector.

According to Huybens and Smith (1998-99), recent theories focus on the significance of informational regulations in credit markets and determine how inflationary trends negatively affect the performance of the financial sector including both banks and equity markets. Due to increase in inflation rate, real rate of return decreases. As a result return on equity and investment reduces. Ultimately bank performance affected. As inflation rises, credit rationing becomes more severe. As a result, banks make fewer loans; resource allocation is less efficient as well as reduction in capital investment. Both long run performance of the

economy and equity market activity destructively influenced by a reduction in capital formation (Huybens and Smith, 1999; Boyd and Smith 1996). Literature review reveals that if inflation increases then return on saving reduced leads towards reduction in saving. Due to its credit becomes rare in such economy (Moore, 1986; Choi, Smith, et al., 1996; Azariadis and Smith, 1996). Boyd. et al. (2001) presented the summary of the impact of inflation on the performance of the financial / banking sector as follows:

- a) Higher inflation rate is linked with higher inconsistency in interest margin and stock return.
- b) In highly inflated economy, there is less long run financial activity because intermediaries will do less lending and capital investment also less effective.
- c) If inflation surpasses to a critical level, then incremental increase in the long run rate of inflation has less impact on banking sector activity.

**3. Research Model**



**4. Research Methodology**

This research is qualitative in nature where the data is taken from large banking segments being categorized by State bank of Pakistan. This segment includes MCB Bank Limited (MCB), National Bank of Pakistan (NBP), Habib Bank Limited (HBL), United Bank Limited (UBL), Allied Bank Limited (ABL) and Bank Al-Falah (BAF) is included. Data is being collected from the financial statements of respective banks. Moreover, additional information is also being collected from the interviews carried out by credit officers and managers of respective bank branches in Bahawalpur. The content analysis technique is used to evaluate the collected data.

**Performance Indicators of Large Banks with  
Percentages & Inflation Rates**

BANKS	Key Performance Indicators	YEARS with Rates				
		2013	2012	2011	2010	2009
<b>MCB</b>	ROE	3.36%	3.59%	3.75%	4.25%	4.80%
	ROA	23.62%	25.11%	26.72%	30.21%	39.2%
	INT.	2.47%	2.47%	2.88%	3.86%	5.19%
<b>NBP</b>	ROE	21.58%	19.20%	14.13%	6.64%	5.95%
	ROA	2.81%	2.72%	1.96%	0.80%	0.73%
	INT.	1.89%	1.85%	1.72%	1.66%	0.97%
<b>HBL</b>	ROE	22.30%	19.62%	17.83%	15.24%	18.3%
	ROA	1.96%	1.84%	1.55%	1.43%	1.46%
	INT.	3.02%	2.96%	3.97%	4.64%	6.72%
<b>UBL</b>	ROE	13.54%	12.09%	15.43%	18.54%	17.5%
	ROA	29.54%	41.30%	51.02%	57.04%	81.3%
	INT.	1.10%	1.29%	1.42%	1.67%	1.74%
<b>ABL</b>	ROE	1.273%	1.133%	1.702%	1.828	1.96%
	ROA	20.50%	18.59%	20.32%	23.39	22.9%
	INT.	2.47%	2.96%	3.29%	3.63%	4.26%
	ROE	5.00%	4.91%	15.33%	17.74%	19.32%

<b>BAF</b>	ROA	0.23%	0.24%	0.75%	0.85%	0.92%
	INT.	1.05%	1.05%	1.21%	1.25%	1.29%
<b>Inflation Rate</b>		7.75%	11.01%	13.66%	10.10%	17.03%

## 5. Discussion

The main drive of the study is to determine the effect of inflationary trends in bank performance in Pakistani perspective. To study this effect return on assets (ROA), return on equity (ROE) and net interest margin is selected as key performance indicators of banking sectors. According to data analysis a positive relationship is found between inflationary trends and return on assets (ROA). Discussion on ROA calculated for the larger banking segments with credit officers and managers describes that when inflation is high indeed planning activities increased and asset utilization becomes effective to some extent but creditors default risk also high. Due to which ROA decreases as inflation increase. When inflation is high due to high interest rate investment in risky and high return projects increase and ultimately at the cost of little loss we earned handsome profits. In the light of above discussion when researchers numerically compare the effect of inflation on ROA contradictory results are find out. As inflation decreases from 2009 to 2013 ROA of MCB, ABL, UBL, BAF decrease drastically while ROA of HBL and NBP show a negative trend with inflation. According to the study conducted by Ramadan et al. (2011), there is high planning activities, low credit risk, efficient cost management, associated with banks profitability and an indirect relationship is found between inflation and return on assets. The outcomes of this study are consistent with literature only in the case of Govt. Owned banks, i.e. HBL, NBP.

Now to discuss the relationship between inflation and return on equity (ROE) in the large banking segment. Through analysis of the table and interviews results, a positive relationship is found between inflation rates and return on equity. As calculated ROE and its relationship with inflation is discussed with the credit officers and managers it is found that during a high inflationary period, the savings become less and very few large loans are sanctioned to reduce the default risk. Shareholders fund is not utilized due to less capitalization and bank's profitability affected as a result ROE decrease. But credit officers of MCB, ABL and BAF claims that when the inflation rate is high indeed corporate financing is reduced, but demand for consumer financing and micro financing increased and high interest rate charged. And handsome returns earned from the investment of shareholders. But according to the result of ROE calculated through annual reports of banks shown in the table represents that as inflation decreases ROE also decrease. There is a significant indirect relationship between inflation and ROE of commercial banks referred by the study of Demirguc and Huizinga, 1999; Aburine, 1998; Naceur and Goaid, 2010. According to Huybens and Smith 1998 to 1999 study, inflation negatively affects the bank performance because during a high inflationary



period, rate of return is decreased. As a result, banks make fewer loans to corporations; resource allocation becomes less efficient and more risky.

Let's discuss the last variable of bank performance measures that is net interest margin. It is a difference between borrowing rate and lending rate. According credit officer of HBL that during high inflationary priory high interest rate is useful for debtors but drastically effecting creditors so as inflation decreased it increased interest margin. Banks get deposits comparatively at high rate during inflation period but due to the increase in the prices of consumer goods demand for consumer finance increase. And people ready to get finance at high rate. Rae of financing is high and ultimately banks get high net interest margin. When researchers compare the calculated data with interviews, it put us in confusion how to explain these trends. From all above discussion and table analysis, it is found that inflation has a positive effect on ROA, ROE and net interest margin of large banking segments of Pakistan. That is the reason why the banking sector of Pakistan remains stable and efficient during worldwide economic recession.

## **6. Research Limitations**

The main purpose of the study is to focus on the variables that are affected by the inflation and that may alter the performance of banks. This research is conducted in the large banks segment of the Pakistan which includes six major banks. But due to time constraint and limited literature published in this field; this research is limited in its impacts and limited number of variables. One of the limits is that this paper includes just three performance indicators of the bank's performance. This paper just includes the banks, which are in Bahawalpur due to small sample size. Variables like investments, savings, etc. may also be taken here as they are affected by inflation, but due to limited access to data this research is limited to the above mentioned variables. The study could have used a lot more macroeconomic variables. Supplementary research can be directed by exploring the profitability of all banking segments and its determinants.

## **7. Recommendations**

- The first recommendation is that a sample size of this research is very small. If research sample size is increased and data is collected from more banks than the derived results will be more reliable.
- Worldwide economic recession on banks outside the Pakistan becomes insolvent but banking sector of Pakistan performs well in that period so for that reason more research should be conducted in this research paper to explore the reasons behind the performance of the banking sector of the Pakistan in that recessionary period.
- Another reason is that the impact of inflationary trends should be conducted on the Islamic banks so that the outcome will be shown the true picture of the banking sectors' performance.

## 8. Conclusion

Through all above discussion, it is concluded that there is a significant association between inflation and bank performance indicators, i.e. return on assets (ROA), return on equity (ROE) and net interest margin. It is found that as inflation increases ROA, ROE and net interest margin of Muslim Commercial Bank Limited, Allied Bank Limited, United Bank Limited and Bank Al-Falah Limited also increases. Positive association is determined among inflation and bank performance of this large banking segment of the Pakistan banking industry. But in case of Habib Bank Limited and National Bank of Pakistan, inflationary trend has a negative trend in their performance. As inflation decreased their return on assets, return on equity and net interest margin increased. The Major reason is that these banks are government banks and the get deposits through government influence. Moreover, salaries of government sector are dispersed through these banks. That's why inflation doesn't affect their performance drastically.

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