Non-Performing Loans and Economic Growth

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Abstract: Non-Performing loans are the big challenge for the Banking sector. This study examined this serious issue by developing the relationship between the Non-Performing Loans and the Economic Growth. For this, the data of Economic indicators (GDP Growth, Interest Rates and Inflation) and Non-performing Loans are taken for the time span of 1998-2010 on annually basis. By applying the regression we concluded there is Negative relationship between the GDP and Non-Performing loans but there is positive relationship between the interest rate and Non-performing Loans. Finally Non-performing loans hurts the Economic growth.

Keywords: Non-Performing Loans (NPL’s), Interest Rates, Inflation and GDP

INTRODUCTION

Banking sector is considering very important sector for any economy. As banks are the main sources of providing blood to the economy in the form of funds. Banks generates funds from the saver and transferred these funds to investors in the form of loan for investments. So in this way banks plays key role in the development of any economy. From the last two decades, number of changing happened in the world of baking and now the banking system all over the world is well established. Over the last two decades Pakistani banking sectors has gone through several changes, as privatization and liberalization polices introduced in the financial reforms.

In the meantime, Non-Performing Loans (NPL’s) are the major problem for the banking sector both in the developed and developing countries. Particularly in Pakistan the amount of non-performing loans increasing rapidly as 10 % to 14% over the last two years. As 80% of the Pakistani banking sector is being run by the private sector, so banks are not willing to pay loans to the investors. In the result interest rates are increasing and ultimately it also affect the economic growth.

REVIEW OF LITERATURE

Lot of research has been done on the Pakistani banking sector but there is very little focus on the Non-performing loans.

Non-performing loans - its causes, consequences and some learning was observed by the Islam et al [1]. They took the data of non performing loans from the secondary data and conducted a detailed interview of 87 managers of 26 branches of 9 different banks along with 12 borrowers. By applying the descriptive statistics they concluded that the funds in fact unutilized and mostly flow out of the economy which ultimately in short runs losses to the institutions and society, and in long run resulted in economy stagnated.

Nkusu [2] examined Nonperforming Loans and Macro financial Vulnerabilities in Advanced Economies. For examining this he took the data of NPL, GDP growth , unemployment, change in the house price index and , change in the equity price index , inflation , nominal effective exchange rate for the time span of 12 years (1998 to 2009) for 26 developed economies. By applying the panel VAR model, he concluded there is significant negative relationship between the non- performing loans and macroeconomic performance Ikhide, S.I and Alawode, AA [3] study financial sector reforms, macroeconomic instability and the order of economic liberalization: The evidence from Nigeria. They have taken the sample of 25 banks (12 banks distressed and other 13 banks are non- distressed) which have a life of three years before and after reforms. By applying the CAMEL analysis (for capital, assets, management, earnings and liquidity), concluded that there is worsen result in the form of bank solvency,
inflation and high interest rates after the banking reforms in Nigeria.

Shar et al [4] conducted a study on Performance evaluation of pre- and post nationalization of the banking sector in Pakistan: An application of CAMEL model. To examine this they divide their findings in four different stages pre-reform period (1982-1987), beginning of the reform (1988-1990), during the reform period (1991-1996) and post reform period (1997-2002). By applying the CAMEL model, they concluded that after reforms the banks becomes sound in form of capital adequacy and earnings. Afzal, A and Mirza, N [5] conducted a study on The Determinants of Interest Rate Spreads in Pakistan’s Commercial Banking Sector. For completion, they took the data of listed banks for the time span of 2004 to 2009 post reform period. They defined net interest margin as dependent variable on bank size, total assets, network size, operational efficiency, market power, Noninterest Income to Total Assets, Return on Assets, Overheads to Total Assets, Employee Productivity, Asset Quality, Impaired Lending to Gross Advances, Sectoral Diversification, Liquidity, Risk Absorption Capacity, Capital Adequacy Ratio, Credit Ratings, Default Likelihood Indicator, Bank Concentration, Interest Rate Volatility, GDP Growth, Financial Development Indicator as independent variables. By running the regression, they concluded that intermediary efficiency is affected by these independent variables.

Nonperforming Loans in the Banking Sector of Bangladesh: Realities and Challenges was examined by Adhikary, B, K. He took the data of 1990 to 2005 [6], concluded that both nationalized Commercial Banks and development financial Institutions diminishing the overall credit quality of the Bangladesh banks. Fung et al [7] examined the Public asset management companies in East Asia and concluded that china with 150% of GDP total loans and 40% of the total loans becomes the non-performing loans. Masood, O and Aktan, B [8] examined the Determinants of Non-Performing Loans: A Comparative Analysis. For the completion of this study they collected the data by questionnaire and directly interviewed the credit managers of Pakistani and Turkey. For turkey they regressed NPL with eight independent variables which are banking regulation and supervision , accounting, auditing and disclosure practices, overall bank capitalization, government intervention in credit allocation, capital base, quality of bank capital ,credit risk assessment, and percentage of bank loans lent to related companies and insiders, while for Pakistani Banks they regressed the NPL for seven independent variables which includes basic education, professional education, years of service, number of courses attended by credit managers, years of experience as credit manager, credit limit of credit managers and communication facilities provided to credit manager’s. After all they concluded that in turkey perspective Government intervention, poor risk management and loans to insider are the major causes for non-performing loans, while in case of Pakistani banks, credit manager communication facilities, and years of experience and service tenure are significantly determinants of non performing loans. Cho, B and shi, H. [9] examined the Economic Perspectives and Accounting Issues of Japanese Banks’ Non-performing Loans , and concluded that convey system, relationship with the main bank and insufficient information are the main problems for the non performing loans.

**METHODOLOGY AND RESULTS**

This paper explore the impact of non performing loans to the GDP growth, Inflation and Interest Rate for the time span of 1998 to 2010. This paper mainly deals with the affect of NPL on macroeconomic variables, as no study has yet been conducted on these issues. This is the first effort in this regard.

The impact of NPL is estimated by defining the GDP growth, Inflation and interest rate as dependent variables on NPL independent variable.

\[
\begin{align*}
\text{GDP} &= \alpha_1 + \beta_1 \text{NPL} + \epsilon_1 \quad \text{1} \\
\text{INT} &= \alpha_2 + \beta_2 \text{NPL} + \epsilon_2 \quad \text{2} \\
\text{INF} &= \alpha_3 + \beta_3 \text{NPL} + \epsilon_3 \quad \text{3}
\end{align*}
\]

By applying the regression analysis we find the following findings:

**GDP**

\[
\begin{align*}
\text{GDP} &= 7.42 - 0.48 \text{NPL} \\
\text{S.E} &= (0.65) \\
\text{T-test} &= (11.40) \\
\text{P-Value} &= (0.00)
\end{align*}
\]

The model is highly significant at 5% level and 10% significant at 10% level.

**INT**

\[
\begin{align*}
\text{INT} &= 0.33 + 0.88 \text{NPL} \\
\text{S.E} &= (0.30) \\
\text{T-test} &= (18.12) \\
\text{P-Value} &= (0.00)
\end{align*}
\]

The overall model is highly significant at 5% level and 10% level.

**INF**

\[
\begin{align*}
\text{INF} &= 12.18 + 0.30 \text{m NPL} \\
\text{S.E} &= (2.17) \\
\text{T-test} &= (5.62) \\
\text{P-Value} &= (0.00)
\end{align*}
\]

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Overall model is insignificant at 5% and 10% level.

**DISCUSSION ON RESULTS**

In the first model, we found $\beta_1$ negative that shows there is negative relationship between the Non-Performing Loans and GDP, which is strongly support the literature. Overall model is highly significant at 5% & 10% level with P-Value of (0.00). In the second model we found $\beta_2$ positive that shows there is positive relationship between the Non-Performing Loans and Interest Rates. Overall model is highly significant at 5% & 10% level with p-value (0.00). In the third model $\beta_3$ is positive but overall model is insignificant at 5% & 10% level.

There are many changing happened in Pakistani banking sector over the period of last 20 years. Dr. Ishrat Husain (1999-2005) takes the proper initiative to lunch the Pakistani banking reforms, in which several Governed banks are privatized. Due to this the political interference level decreases in banking sector which ultimately results in decrease in the amount of Non-performing Loans. At the same time Pakistani Army take over political Government of Pakistan. In the army period Pakistan received huge foreign aids from America and this is the reason in this period Pakistan achieved highest GDP growth in this period.

At the end of army period, Pakistan faces lot of problems like natural disaster, terrorism etc. which hurt the Pakistani economy growth. Due to this Pakistani banking sector also faces the problem of Non-Performing Loans. In nutshell we are found that Non-Performing Loans are very important factor which affecting the Pakistani economic Growth.

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