Microeconomic and Social Factors as Determinants of Non-Performing Loans: Based on Opinion of Pakistani Bankers

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Abstract

Form the past few years the Non-Performing loans not present a good picture in the context of Pakistani banking sector.The aim of the study is to assesses microeconomic and social factors that influence the rate of Non-Performing loans in Pakistani commercial banking sector. Microeconomic factors include monitoring of loan, risk assessment, interest charge and social factors include political interference, banker's incompetence, corruption. This study was based on the Opinion of bankers in Pakistan so the data was collected through primary survey questionnaire from top 10 banks. Regression analysis was used to analyse the factors that influence NPLs in Pakistan. The findings indicate that microeconomic factors like monitoring of loan, risk assessment, interest charge have significant positive relation with Non-Performing loans. The social factors political interference has significant positive relation while banker's incompetence and corruption have insignificant relation with Non-Performing loans.

Keywords: Non-Performing loans, Microeconomic Factors, Social Factors

1 Introduction

Efficiency and good performance of financial sector is dependent on economic growth of a country. Financial institutions are very important for economic prosperity so the efficient functioning of these institutions will bust economic growth. In all financial institutions, commercial banks play a vital role in the growth of economy as they collect savings from those who have surplus of money and lend that savings to those who have shortage of money. Moreover, they also contribute to the economic growth by paying taxes create employment opportunities. Efficiency of these financial institutions is essential because of the direct involvement of commercial banks in succession of the economy. In the time of giving loans to borrowers the major concern of a creditor is to in

what way get back the lending money with-out taking any risk. From the few years banking crisis increased in the whole world (Browmbridge, 1998).These breaks-down not only effect the banking industry but also affect economic growth in the country (Chijoriga, 1997).

The literature of banking indicates that there is link among the bank loss and NPLs. The increasing rate of Non-Performing Loans are caused by poor credit policy. If we look to the other side of the picture it will be prove that non-performing loans in the banking sector are effected by financial disaster. As like the financial crisis in late 2000 in USA which than spread in those countries who have trading relation with USA. Earning of banks largely depend on productive used of loans/advances which increase banks profit and reduce the rate of Non-performing loans (Farhan et al, 2012). As per the study of Gorton, 1998 the increasing volume of Non-Performing Loans caused banking failure which is first step to banking crisis. Financial instability in the developed and developing nation are mainly caused by increasing volume of non-performing loans.

Financial crisis in 2009 affect the whole world Pakistan is one of the country which also suffered from this global crisis. In effect of these crisis in Pakistan was depreciation in currency and decreasing rate of exports. Additionally, ability to repay of the house hold and the firm reduce because of oil prices increased, energy crisis, per unit cost increased, and deficit in budget which than increased NPLs. Pakistani banking sector faced major difficulties just like other underdeveloped countries which damage banking industry and economic growth (Masood, 2009). To improve economic growth in the country reduction in non-performing loans is necessary.

High trend of non-performing loans in Pakistan is harmful for financial growth (Masood, 2009). According to the State Bank of Pakistan repot high rate of interest and cost of borrowing will lead to increased loan defaults which than increased volume of non-performing loans in Pakistan. From 2000 the ratio of non-performing loans in Pakistan is on increasing side. In 2016 the rate of NPL reached to Rs634.5 billion which is increased from 2015 as per the data provide by SBP in 2016. Out of total NPL 31.66% come from public banks, 61.04% from private banks, 6% from specialized banks and foreign bank contributes very little percent.Gafoor et al, 2015 bad loans have strong negative effect on the effectiveness of commercial banks of Pakistan. In the period of 2009 NPLs reduced the operating profit of leading commercial banks in Pakistan. To strength their financial position management must have to take important steps to lessen these loan defaults.In Pakistan, nonperforming loans are growing every year from 2010 tell 2016. Under the Prudential Regulation of State Bank of Pakistan NPLs are classified under three categories Substandard, Doubtful and loss. As per the Regulations when interest/mark-up is overdue by 90 days or more that loan is considered Substandard, when interest/mark-up is overdue by 180 days or more loan is Doubtful and when interest/mark-up is overdue by 1 year or more that loan is considered loss.

1.1 Statement of the Research Problem

Non-Performing loans is world-wide indictor which is harmful for the profitability of banks.The banking sector of Pakistan do not show good picture because the rate non-performing loan is on higher side which not only harmful for banking sector but for the economic growth. So there need to identify microeconomic and social factors that influence Non-Performing loans in Pakistan. As per SBP non-performing loans are

increased in Pakistan from the past few years. The purposes of conducting this study is examine the factors that determine non-performing loans in Pakistan based on the opinion of Pakistani bankers.

1.2 Research Question

What is the impact of microeconomic and social factors on Non-performing loans in Pakistan?

What are the basic factors that caused Non-performing loan in Pakistani banking sector?

1.3 Research Objective

The aim of the study is to identify the microeconomic factors and social factors that influence Non-Performing loans in Pakistan based on the opinion of Pakistani bankers.

1.4 Significance of Study

This study will have focused on banking sector in Pakistan. Commercial banks lend money to all sector of the economy and government but the increasing defaults on loan is also the matter of worry for this sector. This study is conducted to help the commercial banks and regulatory authorities to change their loaning policy and procedure, as per the change in factors that determine non-performing loans.

2. Literature Review

Financial crisis created due to Non-performing loans in East Asian countries, US, and Africa so NPL in not the dangerous for one country it will affect the whole world. As per Adebola et al, 2011 there is need to identify the factors responsible for NPLs and then make policies to prevent the economy form future happing's. Economic development in a country is begin with capital formation. So, financial institution motivates individuals to save their money and used these saving for economic progress. Economist classifies savings in to three broad categories; life cycle saving (saving for retirement, for houses, and for education); precautionary saving (saving for unexpected losses like job loss and medical emergency); bequest saving. From the last 15 years increasing volume of Non-performing loans have been fixation of dread wherever in the world. Due this increasing trend several researchers are concerned to examine the root cause of Non-performing loans. As per the study of Keeton (1987) the reason behind loan losses are weak speciation of cried management, economic condition. Caprio and Kingebiel (1996) carried a research on banking crisis in 69 counties. They concluded that poor management, government interference, corporate governance, and lack of supervision are the main reasons banking instability. The Sign of financial disaster in a country is the increasing ration of non-performing loans (Kaminshy & Reinhart, 1999).

A study conducted by Sankey and Greewalt (1991) they are of the view that internal factors and external of the bank cause NPLs. Furthermore, they sate that interest rate is also the basic reason behind the increasing rate of non-performing loans. Dimitors and Vasoliios (2011) conducte a research in Greek from the period of 2003 to 2005 to identify the factors that determine non-performing loans. The results indicated that bank specific factors management performance and quality through risk administration were responsible for non-performing loans. From few decade, non-performing loans in Pakistan are increasing day by day. As per the repot of SBP non-performing loans and gross loans in Pakistan are increased from 2006 to 2013 which is not a good signal for the banking development and also for economic growth. Browndridge (1998) are of the view

that the reason behind banking failure in the glob is NPLs. A study carried by Bilal Mehmood (2013) on the bank specific factors that determine non-performing loans in Pakistan. Covering the period from 2003 to 2012 using panel data of 13 commercial banks. The result showed that using different credit management tools and assessment model will decrease the volume of non-performing loans. A research carried by Gafoor et al, 2015 in Pakistan on causes of loan defaults. They reported that lack of management knowledge, inefficient monitoring, poor weather condition, weak credit appraisals, and unwillingness to pay back the loans by the borrowers, will caused non-performing loans in Pakistan. Furthermore, they state that increasing rate of non-performing loans will reduce the earing of the banks.

A study of Messai and Jouini (2003) examine the microeconomic and macroeconomic factors that determine NPLs in Spain, Italy, and Greece using panel data of 85 banks covering period of 2004 to 2008. Their results showed that interest rate has positive relation with nonperforming loans. As per Bloem and Gorter (2001) bed loans are increased due to rise in interest rate. Another study carried by Adebola et al, 2011 in Malaysia on determinant of NPLs covering period from 2007 to 2009. Their findings show that interest rate has significant relationship with non-performing loans. Poor monitoring of loan will have caused nonperforming loans. As per Aballey (2009) they conducted a study on bad loan portfolio in African development bank. The results indicated that ineffective monitoring and poor credit appraisal are positively correlated with non-performing loans. Hughes et al, 1996 are of the that incurring more expenses on the borrower monitoring and assessing will reduce efficiency of the bankers but on other side it will also reduce the ratio of non-performing loans. if a loan is not properly assessed it will increase non-performing loans. In time of giving loan if the status of the borrower to refund the loan is not properly assessed it would lead to non-performing loan. According to Chijoriga (1997) loan is converted to bed loan because of government interference. They also stated that for personal benefit government favour specific sector and ignore other sector of the economy so, it will be caused non-performing loans.

2.4. Theoretical Framework
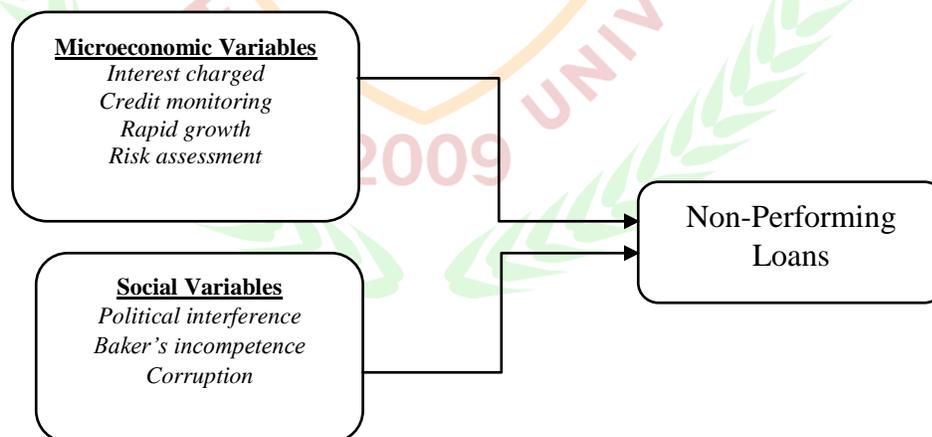
3. Methodology

This section consistence of methods and procedures to collect data on the microeconomic and social factors that influence Non-Performing Loans in Banking sector of Pakistan.

3.1. Population

The study was conducted at banks located in KPK. This is because from 2000 to 2016 the ratio of non-performing loans increased which is the major problem faced by banking sector of Pakistan. In this study survey questionnaire was adopted to know the opinion of bankers about the microeconomic and social factors that influence Non-Performing loans.

3.2. Sampling

Multistage sampling was used for collection of data. Top 10 banks are selected from the population of banks operating in Pakistan from the last 35 years. The questionnaire has been filled from those bankers who involved in any loan activities or in credit department.

3.3. Data collection

The research is conducted through primary survey with the help well structure questionnaire from the bankers. The data was used to evaluate the opinion of the bankers about the factors effecting non-performing loans in Pakistani commercial banking sector. The main purpose of primary data collection is to know the perception of the bankers with respect to microeconomic factors and social factors that will affecting NPLs in Pakistan.

3.4. Instrument of Research

The most valuable way to collect data from a larger population is questionnaire (Babbie, 2001). To accomplish the aim of the study, data was collected from those bankers who are involved in credit decision or part of credit department to assess the factors which determine NPLs in Pakistan. These factors are monitoring of loan, risk assessment, interest charge, political interference, banker's incompetence, and corruption. The questionnaire was adopted from study conducted in Pakistan by Hassan et al, (2015). After some changes and adding more variable according to environmental changes in banking industry the questionnaire. The ranking scale have been used to identify microeconomic factors and social factors that influence Non-Performing loans.

1= Strongly Disagree   2= Disagree   3= Neutral   4= Agree   5= Strongly Agree

3.5. Multiple Regression Model

Multiple regression model is used to analysis the impact of independent variables on dependent variable.

3.5.1 Microeconomic model

$NPL = \beta_0 + \beta_1 ML + \beta_2 RA + \beta_3 IC + \mu$

Where

NPL= Non-performing Loans

ML= Monitoring of Loan

RA= Risk Assessment

IC= Interest Charge

μ = error term

3.5.2 Social model
NPL= β0 + β1PI + β2BI + β3C + μ
Whereas
NPL= Non-performing Loans
 PI= Political Interference
 BI= Banker's Incompetence
C= Corruption
 μ= error term
In this regression models NPL is dependent variable and the independent variables are monitoring of loan, risk assessment, interest change, political interference, banker's incompetence, corruption.

4. Data Analysis and Interpretation

The data was collected through questionnaire by distributing amongst loan officers credit, managers, relationship managers, and recovery officers, and branch managers of selected banks. The questionnaire was send to 200 employees out of 200 166 were completed and returned. The response was 83%.
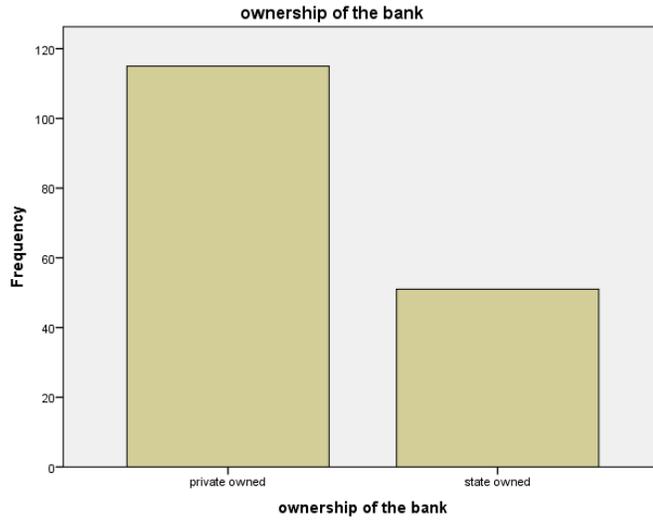
Table 1

Sample size	200
Completed and returned Questionnaire	166
Respondent rate	83.0%

4.1.1. Respondent's position

Table 2 Ownership of the Bank

Employment	Frequency	Percent
Private Owned	115	69.3
State Owned	51	30.7
	151	100.0

Figure 1: ownership of the bank
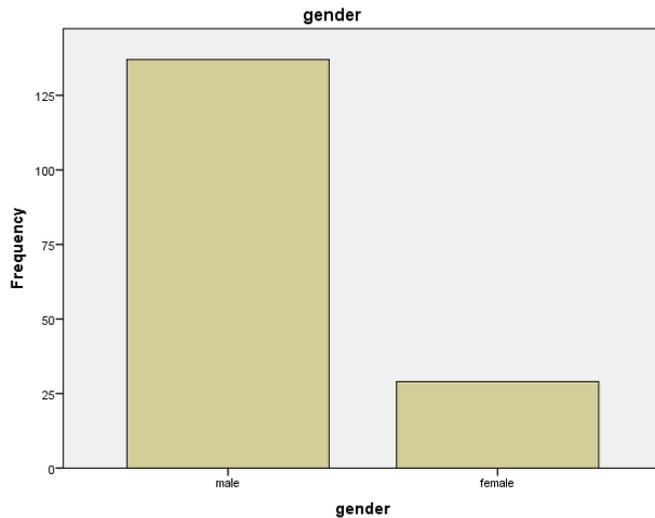

ownership of the bank

The above table indicate that 69.3% of the defendants are from private banks while the rest of 30.7% were from state-owned banks.

4.1.2. Respondent's gender

Table 3: Gender

Gender	Frequency	Percent
Male	137	82.5
Female	29	17.5
Total	166	100.0

Figure 2: Gender of the Respondents


gender

        The survey indicates that in gender profile out of 166 participants 82.5% are male and 17.5% are female. So, it could be assumed that in the credit departments of most of the workers are male officers.

4.1.3 Position in bank

Table 4: Position in bank

Position	Frequency	Percent
Loan officer	40	24.1
Credit manager	45	27.1
Relationship manager	50	30.1
Recovery officer	22	13.3
Branch manager	9	5.4
Total	166	100.0

**Figure 3: Job Title**

job title
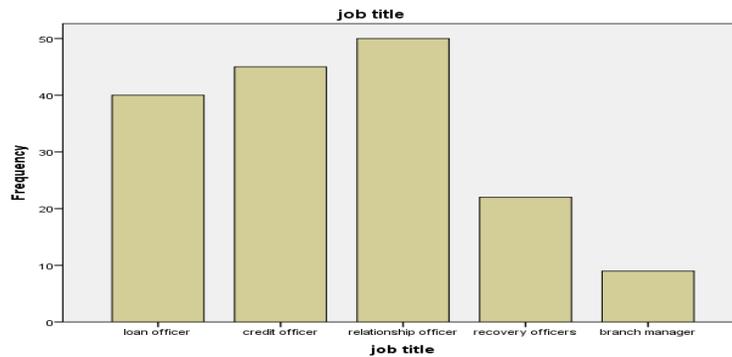
The result of the study indicated that 24.1% of participant are loan officers, 27.1% are credit managers, 30.1% are relationship managers, 13.3% are recovery officers, and the rest of 5.5% are branch managers.

4.1.4. Qualification of Respondents

Table 5: Qualification of Respondents

Qualification	Frequency	Percent
Bachelor degree	42	25.3
Master degree	99	59.6
MPhil/PHD	25	15.1
Total	166	100.0

Figure 4: Qualifications
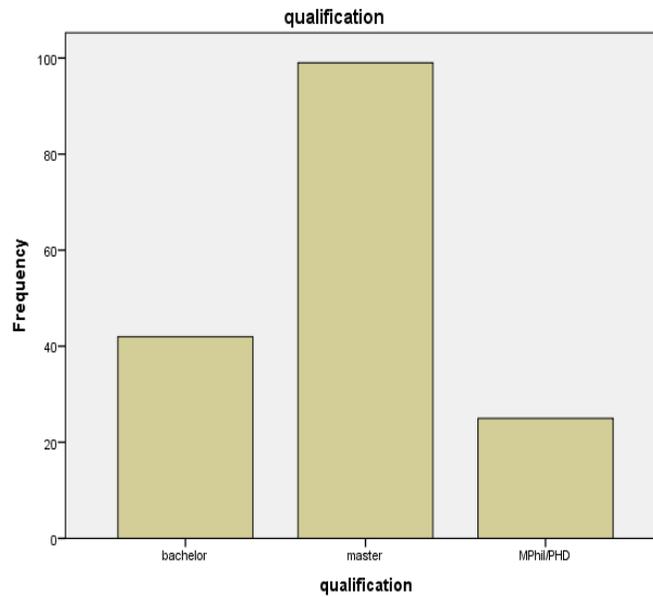
The survey results showed that out of 166 participants 59.6% have master degree, 25.3% have bachelor and 15.1% have MPhil/PHD degrees. This can be understood from the above table that bankers associated to credit department are well qualified.

4.1.5. Experience in Bank

Table 6: Experience in Bank

| Years of Experience in Bank	Frequency	Percent
1-5 years	89	53.6
6-10 years	46	27.7
11-15 years	31	18.7
Total	166	100.0

Figure 5: Experience in Banks

The survey indicates that by experience 53.6% of the respondents have 1-5 years' experience in bank, 27.7% have 6-10 years' experience in bank, and 18.7% of the respondents have 11-15 years of experience in bank.

4.1.6. Experience in Credit Department

Table 7: Experience in Credit Department

Year of experience in credit department	Frequency	Percent
1-3 years	103	62.0
4-5 years	25	15.1
6 or more	38	22.9
Total	166	100.0

Figure 6: Experience in Credit Department
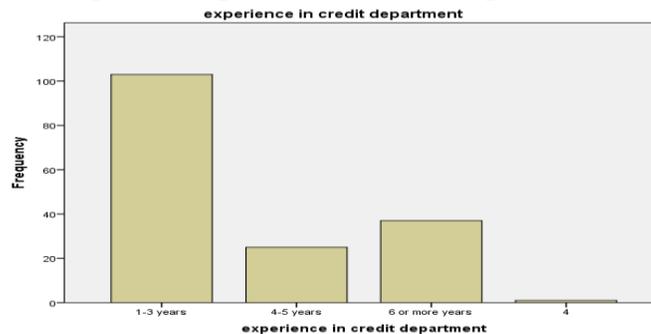
The survey indicates that by experience in credit department 62% have 1-3 years' experience, 15.1 have 4-5 years' experience and 22.9% have 6 or more-year experience.

4.3. Regression Analysis on the Perception of Pakistani Bankers
Table 8: Regression Analysis for Microeconomic Variables

R	.506		
R square	.256		
Adjusted R square	.242		
F	18.544		
Sig	0.000		
Independent variables	**Beta**	**t-value**	**Sig.**
(constant)		3.111	.002
Monitoring of loan	.243	2.983	.003
Risk assessment	.187	2.086	.039
Interest charge	.215	2.799	.006

In this research regression analysis was used to test the significance of the variables. R^2 is the amount of variation that can be explained by variation in independent variables by regression model. In the above table R^2 value is .256 and Adjusted R square is .242 this means that 24.2% of variation in the dependent variable NPL is explained by independent microeconomic variables. F-test measures the significance of estimated regression. At α 0.05 significance level, the F value is 18.544 with sig (p=0.000) which indicate that model is good fit. The value of beta for the monitoring of loan in the table is (.242) is significant (p=0.003) at 5 percent significant level. For e.g. 1-unit change occurs in monitoring of loan the change in the NPLs is 24.2%. As per the results the bankers perceive that there is significant relation between monitoring and non-performing loans. The T value is 2.983 so it is accepted that monitoring and NPLs are related to each other. The beta value for risk assessment is .187 which is significant at level of 5%. So, bankers perceive that there is significant relation between NPLs and risk assessment. The T value is 2.086. Additionally, beta value for interest charge (0.215) which is also significant (0.006) at level of 5%. One-unit increase in interest charge will increased NPLs by 21.5%. the T value for interest charge is 2.799 which is statistically significant.

Table 9: Regression analysis for Social variables

R	.491		
R square	.242		
Adjusted R square	.228		
F	17.198		
Sig	0.000		
Independent variables	**Beta**	**t-value**	**Sig.**
(constant)		4.365	.000
Political interference	.432	4.917	.000
Banker's incompetence	.032	.366	.715
Corruption	.095	1.293	.198

In the above table 9 the R square value for social variable is .242 and adjusted R square is .228 which means that 22.8% of variation in the social variables is explained by variation in NPLs. The F value for social variable is 17.198 is significance (0.00) at level of 5% which indicated that model is good fit. The beta value for political interference is .432 is significance (0.000) at 5% level. The T value is 4.917. the beta values for banker's incompetence and corruption is .032 and .095 which is insignificance at level of 5%. This means that bankers perceive that banker's incompetence and corruption has no significant relationship with non-performing loans in Pakistan. Addition to that the t value for banker's incompetence and corruption is .366 and 1.293 which is less than tabulated value so it is assumed that these two variable has no significant relationship with nonperforming loans.

5.1 Conclusion

Various researches were conducted on secondary data there is need to figure out those factures which determine NPLs through primary data.This research was carried to identified the microeconomic factors and social factors that influence Non-Performing loans in commercial banks of Pakistan. To achieve the objective of the research primary survey questionnaire was conducted from those bankers who deal NPLs portfolio or part of credit department. From the point view of the respondents, the following microeconomic and social factors affect non-performing loans in Pakistan. The result of the study indicated that the bankers perceive that microeconomic factors like monitoring of loan, risk assessment, and interest charge have significance positive relationship with Non-Performing loans. The study showed that stick monitoring of loan will improved the performance of the loans. The results also highlight that with-out proper assessment of loan by the bankers will leads to loan defaults. Additionally, if the borrower is

compensated while giving loan it will caused non-performing loans. The results further indicated that interest charge has a strong relation with non-performing loan and as important factor affecting the ratio of NPLs. The study reveals that increase in the interest rate will reduce the borrower's ability to repay their loans. In this research, social factors will also be investigated to identify social factors that will influence non-performing loans in Pakistan. So, the bankers perceive that political interference has significant relation with NPLs while on other hand banker's incompetence and corruption have insignificant relation with non-performing loans in the context of Pakistani baking sector. The result indicates that political pressure or government interference in banking activities will caused bad loans and it will turn into NPLs.

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