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The Determinants of Credit Risk in Commercial Banks of Pakistan

Sohaib iqbal kasana
The University of Lahore, Pakistan

Qazi Muhammad Naveed
Lecturer, Management of Science, The University of Lahore, Pakistan

Abstract
Purpose: The purpose of the concern study is to investigate the determinants of credit risk (CR) of commercial banks in Pakistan.**Variable Specification***:* The explanatory variable of the concern study are macro and bank specific variable that has been used in the study. Macro variable includes GDP growth (GDPGR) and growth in interest rate(IRGR), while the bank specific variable consist capital adequacy ratio(CAR), growth in advances(ADVNGR), operation inefficiency(OPINF), loan to depots ratio(LD), loan loss provision (LLP) and size of the bank. The dependent variable of the study was credit risk (CR) which is measured as the ratio of non-performing loan to total loan.**Design/Methodology***:* The size of the sample consist 26 commercial banks covering data period from 2007-2013. This macro date was collect from state bank website and annually financial statement of commercial banks. The relationship among independent and dependent variable will be estimated through OLS regression (ordinary least square method). Panel data model such as, fixed affect model and random affect models were used to conduct detail panel data analysis. The robustness of the results will be statistically checked through Hausman specification test.**Findings**: The results show that there capital adequacy ratio and loan loss provision had highly significant positive correlate with credit risk, while this study shows that operating inefficiency, growth in GDP and growth in advances had significant relation with credit. Furthermore return on asset (ROA) and size have been significant but negative impact on credit risk in commercial banks of Pakistan. Growth in interest rate has no impact on credit risk in commercial bank of Pakistan. The correlation value independent variables have less than one.While though applied the fixed effect and random affect models will be used to conduct detail panel data analysis. It was revealed that operating inefficiency, loan deposit ratio, and size has insignificant relation with credit risk in commercial banks of Pakistan. The relationship of growth in advance is negative with capital adequacy ratio having value (-0.48). While the relation with credit risk and growth in GDP is positive. Growth in advances has negative relation with LD, LLP, OPINF, ROA and size.
Keywords: Credit risk, Macroeconomic factors, bank specific factors

1. Introduction

Banks play a key role for the development of economy. Economic development depends upon the development of banking sectors. The primary function of bank is to receive deposits from those who have extra money and loan it among those who need it. However in the present time banks are very conscious in the distribution of its loan due of non-performing loans Sontakke & Tiwari (2013).

Banks are the major source of funding in any country for businesses as well as country level projects. However banks play an important role to transfer the deposits from over plus to lending, in the form of loan and advances. As noted by Daniel & Wandera (2013) banks play an important role to come forth the economy where most creditors do not have access to the capital market. So, banks can be called as mediator between capitalist and creditors.

According to Rawlin *et al* (2012) the major aim of business organization is to earn profits. Therefore, any assets of the banks should use for earn profit. Banks do their business by issuing various types of loans so they earn profit by managing these loans and advances. It is the basic source of revenue for the commercial banks Daniel & Wandera (2013). The banks grant their loans to different people like individual organizations as well as government, for the purpose of their investment so that they can earn profit from these loans. Banks set their deposits with high margins from creation of credits as loans. If the assets do not generate any income, the bank ability would be in question and in this case asset of banks become weak and these types of banks normally lose their faiths and confidence of customers. Ultimately, unrecoverable amounts of loans are written off as non-performing loan. Mallick *et al* (2010).

Macroeconomic factors have a great impact on NPLs in banking sectors and the major factors that have impact on the crisis of banks are particularly unfavorable conditions such as low GDP growth low rate of employment, high interest rate and increase in inflation (Demirguç-Kunt & Detragiache 1998: Llewellyn 2002). It has also seen banks face due to internal financial and structural weakness Laeven & Valencia (2010).

The economic environment also cause banks crisis as it relates with recession of business. Where there is a boom, banks are in stable condition but on the other hand when there is recession banks face financial crisis.

Many studies have gave their attention for this purpose have concluded that the macroeconomic environment as well bank specific are great important in the determination of the credit risk.

The financial crises in recent years need to develop models that could help find out the possible factors which have major cause the crises. The ongoing global financial crisis gives the provoke to the policymakers who should give attention on development of the factors and methods that could asses time identification. In this regard focus is given to on the development of the early warning systems (EWSs) that could give the policymakers and market participants some warning that a crisis is near to occur.

Western and African countries conducted many studies on determinants of non-performing loans and found banks specific factors such as poor credit assessment, failed loan monitoring, underdeveloped credit culture, are the main causes of non-performing loans. There are also revealed that aggressive lending, compromised integrity, weak institutional capacity, overdue financing had an effect on the occurrence NPLs. So this study is going to determinate the credit risk on the base of macroeconomic variables and bank specific factors are used in commercial banks of Pakistan.

This study use macroeconomic variables growth in GDP, growth in interest rate to determinate the credit risk in commercial banks. While the important bank specific variables like capital adequacy ratio, loan loss provision and growth in advances are as explanatory variables used in this study. The data of 26 commercial banks was used to determinate the credit risk in Pakistan for period of 2007 - 2013.

2. Empirical Literature

This chapter provides evidences which identify the major determinate of bank loans, particularly and nonperforming loans. The many researchers have conducted a lot of studies on determinants of credit risk (CR), due to its significance impact for the bank's failure. There are a various variables that affect the NPLs .This study focused on both bank specific and macroeconomic determinants credit risk of commercial bank in Pakistan. Internal factors are caused by internal functions and activities of bank, and are due to decisions and practices of officials. These factors are control able in which the manager can prevents them through using suitable method, determination and elimination of weakness and improvement of process. Whereas, external factors can`t be controlled by bank managers and are caused by external environment including effect on implementation of decisions and also government policies.

For instance; unexpected events, changing in rules and obligations, political and economic changes (inflation and slump) are external factors (Biabani *et al* 2012).However, a variety of variables that got more attention and included in this study are loans to deposit ratio, capital adequacy/solvency ratio, profitability (ROA & ROE), lending rate and effective tax rate.

Messai & Jouini (2013) investigate the non-performing loan in three different countries (Italy, Greece and Spain) used the data of periods from 2004 -2008, because these countries face the financial crises in 2008. The study used both bank specific and macroeconomic variables to find out the NPLs in these countries. The macroeconomic variables was the rate of growth of (GDP), unemployment rate and real interest rate and banks specific were the return on assets, the change in loans and the loan loss reserves to total loans ratio (LLR/TL). The study employed panel data model to investigate the relationship between explanatory and dependent variable. GDP and profitability have completely negative relation with NPLs and have positive relation with unemployment rate, the loan loss reserves to total loans and the real interest rate.

Similarly, Aemir & Rafisa (2014) explained the factors that are associated with credit risk with the reference of Ethiopian Banks from period 2007 -2011, used the quantitative approaches in ten commercial banks. This study used the banks specific variables to investigate the credit risk in commercial banks like credit growth, size, ownership, operating efficiency, capital adequacy and liquidity. Housman test was used to select between fixed effect and random effect model and OLS technique was used to check the result, ownership and operating efficiency have positive relation with credit risk profitability, capital adequacy and bank liquidity have negative but statistically insignificant relationship with credit risk.

Furthermore the empirical investigation conducted by Ghosh & Das (2007) the non-performing loan in Indian state owned banks. This study incorporates both macros level and at bank level variables from the period of 1994-2005. Macro level variable was GDP and bank level real loan growth, operating expenses and bank size. The study employed OLS and generalized method of moments (GMM) to check the relation between non-performing loans and macro, banks level variables. The results revealed that GDP has negative relation with NPLs and interest rate and operating expanse have no significant result, loan growth, size have positive relation with NPLs.

However, Ahmad & Ariff (2007) was find out the factors that are associated with credit risk is the ratio on non-performance loan to total loan in different developed and developed countries like Australia, France, Japan India, Korea, Malaysia, Mexico and Thailand. The banks specific variables are used like liquidity, operating efficiency loan deposit ratio and spread to find out the credit risk. Different countries have different rating of credit risk like Thailand have more credit risk and Malaysia was in second number in credit

risk .Developed countries have low credit risk. Different banks specific variables have different impact in different region. It was seen that developed countries have better risk management as compare to underdeveloped countries.

Beside Castro (2012) had checked the credit risk in commercial banks of five different countries. Greece, Ireland, Portugal, Spain and Italy (GIPSI) were used as the panel date from 1997 -2011, credit risk was determined through the macroeconomic variables like GDP. The study analyzed that GDP and credit risk has inverse relation between them. While the other variables were direct relations with credit risk such as unemployment rate interest rate, exchange rate and credit growth during the financial cries time. This study was main focus on unemployment rate and interest rate. OLS technique was used in this study.

Similarly, Louzis (2010) examined the non-performing loan; this study proved that macroeconomic and bank specific variables are used to determinate the credit risk. This study comprised of quarterly data from 2003-2009. The lagged dependent variable is negative and statistically significant for business and consumer loans. Here it was analyzed that GDP has negative relation with business loan. It was more significant in case of unemployment and has no considerable effect on mortgage loan. Interest has positive relation with business and consumer loan due to floating rate as compare to mortgage loans.

Fainstein & Novikov (2011) investigated the impact of macroeconomic and bank specific variables on the non-performing loans in three Baltic States. Used quarter date for each state but the time periods of all state were different common time period was 2002-2009. On bank specific variable was used to determine the NPLs that was aggregated loan portfolio and three macroeconomic variables were used in this study that were GDP, real interest rate and unemployment. OLS technique was used to check the relation with depended and independent variables Sometimes GDP and interest rate show positive result and negative result and sometimes mix result as well. On the other hand the unemployment has significant positive affect on NPLs in the both business and consumers loans.

According to an empirical study made on commercial banks in Nepal by Poudel (2012) the study used the penal date of 31 conventional bakes from the periods 2001-2011. The study used the bank specific variables to evaluate the credit risk management, profitability ratio to default rate, cost of per loan assets and capital adequacy ratio. The study shows that all the factors have equal importance to determinate the credit risk management.

Beside, Messiah & Jouini (2013) conducted a study on three countries namely Italy, Greece and Spain for the period of 2004-2008. The objective of this study was to identify the determinants of non-performing loans for a sample of 85 banks. The variables included both macroeconomic variables (GDP growth rate, unemployment rate and real interest rate) and bank specific variables (return on assets, loan growth and the loan loss reserves to total loans). The study applied fixed effect model and found a significant negative relationship of ROA & GDP growth rate. The unemployment rate, loan loss reserves to total loans and the real interest rate positive relationships with NPLs. For a significant positive association between NPLs and real interest rate, they justify that when a rise in real interest rates can immediately leads to an increase in non-performing loans especially for loans with floating rate since it decrease the ability of borrowers to meet their debt obligations. In addition, a significant negative relationship between ROA and the amount of NPLs.

Furthermore the study made by Saba *et al* (2012) investigated the factors that are associated with NPLs with the reference of developed country US banking sectors, used the penal data periods from 1995-2010 to checked the relation through used the regression modal in dependent and independent variables. The study used both macroeconomic and firm level variables real GDP per capital, inflation had positive relation with NPLs, while macro factors have association with the NPLs rate.

Masood & Aktan (2009) conducted the study on the factors that has major impact in NPLs in commercial banks in Turkey and Pakistan from the period of 1999-2001. This paper uses the survey-based methodology to investigate the determinants of NPLs. In this study primary data was used, collect by questions air from different credit mangers of public and private banks. The ordered pro bit models were applied in the study and it was analyzed that poor credit risk management is the one of the main causes NPLs in Turkey. In Pakistan it was exposed that the facilities provided to the credit manger were the main cause of NPLs.

In this regard is that of Al-Wesabi & Ahmad (2013) to determinate the factors on credit risk in Islamic banks in Gulf Cooperation Council by collecting the data of 25 Islamic banks from the period of 2006-2010. In this study NPLs wear used as a proxy variable to checked the credit risk in Islamic banks. Both the macroeconomic and bank specific variables were used as independent variables. After using the regression model the results shows liquidity, management quality and GDP has significant impacts in credit risk in Islamic banks.

Besides, Arora (2013) find out the factors that was associated with credit risk of public and private banks in India. In the study banking sectors were divided in different parts and checked that has any difference in nature of those sectors on credit risk. The analysis of this study revealed that Indian banks efficiently manage credit risk. The random fixed modal wad applying and results also indicate that there was a difference between

the Indian Public and Private sector banks in Credit Risk Analysis. Credit Risk management was better in old Private sector banks and New Private Sector banks, as compared to State Bank of India. This reflects that in order to improve credit risk analysis system in banks.

Adebola *et al* (2011) investigated the factors effecting NPLs in Islamic banks of Malaysia from the period of 2007-2009. This study used the ratio of NPLs to total loan in Islamic banks to measure the extent of NPLs in Malaysia. The independent variables were industrial production index, interest rate and producer price index. After incorporating the following technique ARDL and Granger causality test it was found out that the interest rate in long run has a significant positive relation with NPLs. Producer price index has a significant negative impact on NPLs.

Klein (2013) conducted the study on NPLs in Central, Eastern and South- Eastern Europe (CESEE) in the period of 1998–2011. In order to determine the NPLs in (CESEE) banks both the macroeconomic and bank specific variables were used. Macroeconomic variables consist of GDP growth, inflation, and unemployment. After applying the research technique it was revealed that ROA and ROE have negative impact on NPLs. While in the business cycle unemployment and increasing inflation rate had positive relation with NPLs.

One of this regard is that of Park & Zhang (2012) investigated the relationship between macroeconomic and bank level to NPLs before and during the financial crises with the reference to US banks. Before and after economic crisis the data was incorporated respectively from the time period of 2002-2007 and 2007-2010. OLS technique was applied to analyze the data, GDP and unemployment rate as independent variables and the bank specific variable were solvency ratio, inefficiency ratio, return on equity, bank size, and non-interest income. Before the financial crises result of high level GDP and size had inverse relation with NPLs and the unemployment has direct relation with NPLs. While the inefficiency has no significant relation with credit risks both in after and before financial crises. Solvency and profitability has negative relation with NPLs. During the financial crises GDP, unemployment and ROA have negative relation with NPLs.

Louzis *et al* (2011) examined the determinants of NPLs in the Greek financial sector used dynamic panel data model and found as real GDP growth rate, ROA and ROE had negative whereas lending, unemployment and inflation rate had positive significant while loan to deposit ratio and capital adequacy ratio had insignificant effect on NPL.

As the majority of empirical research is focused on developed economies, therefore, the findings cannot be generalized in the context of Pakistan. Therefore the study aims to investigate the phenomena in the context of Pakistan. The governance infrastructure of the banking sector in Pakistan is divergent than those developed economies. Furthermore most of the studies have only incorporate the macro variable to determine the credit risk, the current study incorporate both bank specific and macro variable to evaluate their impact on credit risk.

On the base of previous studies this study used independent variables such as growth in GDP, growth in interest rate , growth in advances , size, loan loss provision, loan to deposit ratio, and operating inefficiency have used to determents the credit risk in commercial banks of Pakistan.

3. Research Methodology

Unit of analysis for this study is the banking industry of Pakistani commercial banks. Baking sector is selected as unit of analysis, because of to rapidly changing in global environments different risk like non-performing loan change in GDP, interest rate and bad management reduce the profitability of commercial banks. Credit risk is the threat to solvency of commercial banks. The basic objective of this studies to determinate the credit risk in commercial banks. This study used panel date. Secondary sources of data is extracted from the annual reports of the 26 commercial banks in Pakistan for the period of 7 years from 2007-2013. The study is done on Pakistani commercial banks to determinate the credit risk (CR). The data of GDP and IR was taken from state banks website. Sampling is a method of selecting a valuable sample for the purpose determining parameters of the whole population. Random sampling technique is used to select the sample. As the majority of empirical research is focused on developed economies, therefore, the findings cannot be generalized in the context of Pakistan. Therefore the study aims to investigate the phenomena in the context of Pakistan. The governance infrastructure of the banking sector in Pakistan is divergent than those developed economies. Furthermore most of the studies have only incorporate the macro variable to determine the credit risk, the current study incorporate both bank specific and macro variable to evaluate their impact on credit risk.

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Model

CRit= $\beta 0$ +$\beta 1$(GDPGR)it + $\beta 2$(IRGR)it+ $\beta 3$(ROA)it+β4(ADVGR)t+ $\beta 5$(LLP)it+ $\beta 6$(LD) it + $\beta 7$(CAR)it + $\beta 8$(SIZE)it+ β9(OPINF)t+ +εit

Table No. 1

Sr, No	Name of variables	Proxy for variables	Reference
1	Credit risk	Non-performing loan / Total loan	
2	Growth in GDP	(Current year rate – Previous year rate) / Current year rate	(Boudriga*et al* 2009:Djiogap&Ngomsi 2012: Makri*et al* 2014)
3	Growth in interest rate	(Current year rate – Previous year rate) / Current year rate	(Rajan& Dhal 2003: Messiah &Jouini 2013:Ali (2013).
4	Growth in advances	(Current year rate – Previous year rate) / Current year rate	(Caprio*et al*, 1994: Aver, 2008: Nkusu, 2011: Louzis *et al* 2012)
5	Return on asset	Total income / Total asset	(Boyd &Runkle 1993: Boudriga*et al* 2009: Messiah &Jouini 2013)
6	Capital adequacy ratio	Total Capital / Total Asset	Aemir&Rafisa 2014: Poudel 2012:Boudriga*et al* 2009)
7	Loan loss provision	Loan loss provision / Total loan	(Ahmed *et al.* 1998; Gueyie& Ortiz, 2002; Ahmad, 2003:Metzemakers 2004)
8	Operating inefficiency	Operating expenses /Total asset	(Pages &Saurina 2000: Berger & De Young 1997:Tehulu&Olana 2014).
9	Size	Natural log of Asset	(Salas &Saurina 2002: Hu *et al* 2006).
10	Loan to deposit ratio	Total loan / Total deposit	(Louzis*et al* 2011: Swamy 2012)

Table No 2: Correlation analysis

	CR	CAR	ADVNGR	GDPGR	IRGR	LD	LLP	OPINF	ROA	Size
CR	1.00									
CAR	0.69	1.00								
ADVNGR	0.71	0.46	1.00							
GDPGR	-0.63	0.43	0.36	1.00						
IRGR	0.66	-0.42	-0.49	0.26	1.00					
LD	-0.73	-0.48	-0.38	0.06	0.04	1.00				
LLP	0.72	0.32	-0.45	-0.44	-0.05	-0.17	1.00			
OPINF	0.61	0.33	-0.45	-0.45	0.07	-0.08	0.09	1.00		
ROA	-0.63	-0.44	-0.46	0.26	-0.06	0.06	0.06	-0.09	1.00	
SIZE	-0.59	-0.36	-0.49	-0.45	-0.12	0.14	0.11	-0.51	0.09	1.00

Table no 2 tests the correlation among all the variables used in the study. The relationship of credit risk and capital adequacy ratio is positive having value (0.71). While the relationship in growth in advances and growth in GDP is positive. Growth in advances has negative relation with LD, LLP, OPINF, ROA and size. Same as for capital adequacy ratio has positive relationship with credit risk, growth in GDP. Beside it has negative relationship with growth in interest rate and loan to deposit ratio has value (-0.42) and (-0.48) respectively. CAR has positively correlated with OPINF and ROA. The growth in GDP is positive relationship with IRGR and LD. The relationship with loan loss provision and size of the banks is negatively correlated i.e. (-0.45) and (-0.49) respectively. Growth in interest rate has a positive correlation with OPINF and LD. While the LLP, SIZE. And ROA have negatively correlated with credit risk. The relationship loan to deposit ratio is positive with ROA and SIZE. And same as correlation with LLP and OPINF show negative. There is a positive relationship between OPINF, ROA and size with loan loss provision. Operating inefficiency show the negative correlation with return on asset and size.

Hausman Test

	Chi-sq. statistic	Chi-sq. d.f.	Prob.
Cross- section random	0	9	0.04

Hausman specification test fixed effect model is the best fit to explain the relationship among variable being selected. After running fixed effect test, Hauseman specification test is employed to check the viability of the model.

Fixed effect

Table NO: 3

Independent Variables	Coefficient	Std. Error	t-Statistic	Prob.
ADVNGR	-0.01456	0.0257211	2.278846	0.0398
CAR	0.04442	0.014255	2.287366	0.0326
GDPGR	-0.002333	0.277580	2.498374	0.0235
IRGR	0.021723	0.292131	1.223996	0.6497
LD	0.012818	0.013129	-1.543944	0.7354
LLP	0.340566	0.006478	2.453654	0.0146
OPINF	0.243795	0.017003	1.146582	0.6558
ROA	-0.001027	0.002751	3.743495	0.0103
SIZE	0.014758	0.010991	1.2743834	0.6450

R-squared	0.742556	Mean dependent var	0.144752
Adjusted R-squared	0.362875	S.D. dependent var	0.129439
S.E. of regression	0.103319	Akaike info criterion	-1.53096
Sum squared resid	1.569183	Schwarz criterion	-0.9148
Log likelihood	174.3173	Hannan-Quinn criter.	-1.28118
F-statistic	0.004201	Durbin-Watson stat	1.46778

The study employed panel data model to explain the dependency of dependent variable on explanatory variable. After OLS regression, the fixed effect and random effect model are tested to statistically signify the relationship. The specification tests robustly signify that fixed effect model is best to explain the relationship among variable. According to the table 3 In terms of significance level, all independent variables have p and t-values of less than the selected significance levels (5%) and greater than 2 respectively except for SIZE, LLD and IRGR. As shown in the above table ROA and LLP had strong and statistically significant (p-value=0.00) impact on the level of credit risk. Besides, CAR, GDPGR and ROA had statistically significant (p- value = 0.032, 0.0235 and 0.0365 respectively) impact on the level of NPLs at 5%. However, IRGR, SIZE and LD had no statistically significant impact on the level of NPLs with a p-value of 0.6497, 0.6450 and 0.7354 respectively.

The fixed effect model indicate that there is significant relation between credit risk and growth in advance but inverse direction , p-value 0.0398 and show the t- value is 2.278846. Capital adequacy ratio used to determines the risk taking behavior of commercial banks, this study Indicate statistically significant and positive impact of capital adequacy ratio on credit risk (CR). While t- value 2.287366 and p- value is 0.0322.

The result shows that there is positive and significant relationship between growth in GDP and credit risk as for the p- value is 0.0235 and t- value is 2.498374. As well as the loan to deposit ratio and credit risk has insignificant relation each other. The p-value is 0.7354 and t- value 2.54394. The loan loss provision has significant dependency with credit risk as the p and t values are 0.0146 and 2.4536 respectively. The size of banks has positive but insignificant relation with credit risk as for the p- value and t- value are 0.6450 and 2.27734 respectively. Whereas return on asset has significant and inverse relation with credit risk. The p- value is 0.0103 and t- value is 3.74349.Whereas the growth in interest rate has insignificant and negative relation with credit risk. The p- value and t- value are 0.6497 and 2.2239 respectively.

Conclusion

The main objective of the study was to examine the determinants of credit risk (CR) of commercial banks in Pakistan. The study based on panel data analysis on the time period from 2007 - 2013. The data was analyzed by using ordinary least square (OLS), fixed affect model and random affect models were used to conduct detail panel data analysis. The robustness of the results will be statistically checked through Hausman specification test. This study found out that all the independent variables as for growth in advances(ADNGR), growth in GDP(GDPGR) capital adequacy ratio (CAR) ,SIZE ,return in asset (ROA) ,loan loss provision (LLP) , loan to deposit ratio(LD), have significant effect on credit risk. However, the results of study that growth in interest rate (IRGR) has insignificant impact on credit risk of commercial banks of Pakistan.

Similarly, the study also found out that capital adequacy ratio (CAR) has positive and highly significant impact on credit risk (CR) of commercial banks in Pakistan. The results of study indicate banks with weak capital adequacy have not tendency to absorb possible loan losses. Furthermore the return on asset (ROA)

has negative effect on credit risk in commercial banks of Pakistan. This implies that commercial banks in Pakistan are concise to increase return via in utilizing its assets. As for as size has negative impact on credit risk in commercial banks of Pakistan. This reveled that big banks have efficient risk management system that overcome these problem.

Similarly, loan to deposit ratio has positive dependency on credit risk of commercial banks of Pakistan. This is indicate that bank lend more money as compare to receiving from account holder. This factor directly effect on capital of bank that lead to solvency of banks.

This study examined the both macro and banks specific variables to determinate the credit risk in commercial banks in Pakistan. However there are many extra variables that are not includes in this study. The further study may be generalize the previous study from including the some more macro variables like variables, inflation rate , unemployment rate , foreign exchange rate and tax. While the banks specific variables includes return on equity and liquidity are can also be consider in future study.

This study used financial insinuation for determinate the credit risk while in future study both financial and nonfinancial sector can also be include in the study and random sampling while the future study may be used convenience sampling to easily collect the data. This study used regression modal and random fixed effect modal for analysis the determinate the credit risk while the future study may use Generalized Method of Moments for better analysis the result. This study used six year annual date future study can extend the coverage time period.

Based on the findings of the regression analysis and conclusion, the following recommendations were forwarded. In order to growth in advances bank manager should focus on quality of loan instated of quantity of loan. Some mangers did not give full intention toward consumer financial position and grant the loan. Due to this factor banks face the non-performing loan. On the other side management should improve the internal control system to regulate the minimum capital requirement for risk taking behavior in banks. Most of the banks ignore this important factor and facing solvency risk due to over granting the loans. The loan department should improve the efficiency to follow up the customer before payment time and before the lending the loan should screening the customer as his financial position moral crater.

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