

Full Length Research Paper

The effect of NPL on profitability of banks with reference to commercial bank of Ethiopia

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Abstract

Ethiopia is one of the developing countries of South Africa. The banking industry in Ethiopia is facing different types of risks associated with its functions. But according to Van Gestel & Baesens (2009), non-performing loans have been the most principal and perhaps the most important risk type that has been present in finance, commerce and banks too. Non-performing loans have been defined from different perspectives by different researchers and organizations. Most researchers agreed with the definition given by Basel (1999) who defines it as 'the potential that debtor or counterparty default in satisfying contractually predetermined obligation according to the agreed up on terms'. Because of the failure of trading partner to repay its debts in full can seriously damage the affair of the other partner. The default of a small number of key customers could generate very large losses and in an extreme case could lead to a bank becoming insolvent. Nonperforming loans are not confined to the risk that borrowers are unable to pay. It also includes the risk of payments being delayed, which can also cause problems for the bank. In order to protect their own interest and the wealth of bank depositors, banks need to investigate and monitor the activities of existing borrowers. Adequately managing of those risks related with credit is critical for the survival and growth of any financial institution. As development takes place, one question that arises is the extent to which the credit can be offered by commercial banks? This study enables to find out the answer to this question.

Key Words: Nonperforming loans, Mitigation of risk, Counter party, Key customers, Protection, Borrowers.

Introduction

Perfect banking system is the basis for any country's development and also to have constructive economy. It is a known fact that many banks in the world are the victims of the Non Performing Loans by which the Banks' overall profitability gets downfall. They affect a lot on the total performance of the banks and even on their survival. Though many researchers tried to suggest solutions to this chronic problem, it is still required to know the probable remedies for the same. This study is mainly concentrated on the financial aspect of the banks, though Non Performing Loans affect banks in many aspects.

Objective of the study

The general objective of this study is to assess the impact of Non Performing Loans on the financial performance of commercial banks in Ethiopia.

Specific objectives are

- To analyze the impact of nonperforming loans in terms of Nonperforming loan Ratio (NPLR) on the profitability of the banks.

- To analyze whether “Capital adequacy ratio (CAR)” has significant impact on the profitability of commercial Banks in Ethiopia
- To determine the relationship between credit risk management and profitability of the selected commercial banks in Ethiopia.

Hypothesis of the study

Throughout the research, the following two hypotheses have been tested.

H₁: Nonperforming loan Ratio (NPLR) has significant impact on the profitability of commercial Banks in Ethiopia.

H₂: Capital adequacy ratio (CAR) has significant impact on of the profitability of commercial Banks in Ethiopia

Significance of the study

- It will show the impact of nonperforming loans on banks’ financial performance that enables the banking sector to take precautionary steps to avoid undue credit risk.
- It will give a motivation to other researchers to conduct a further research on the credit risk management practices.

Scope of the study

The study has applied Non Performing Loan Ratio(NPLR) and Capital Adequacy Ratio(CAR) as the measuring instruments of credit risk management and Return on Asset (ROA) as indicator of performance in terms of profit.

Limitation of the study

The study is limited to the following five commercial banks;

1. Commercial bank of Ethiopia
2. Nib international bank
3. Dashen bank
4. Awash international bank
5. Bank of Abyssinia

- The study is limited to 10 years of banks’ data.
- The study is based on secondary data only.

Methodology of the Study

The study is based on two independent variables (i.e., Non Performing Loan Ratio and Capital Adequacy Ratio)

and one dependent variable (i.e., Return on Assets). But there are two major alternative measures of profitability, namely ROA (Return on Assets) and ROE (Return on Equity) in which ROA is considered to be the apt as it considers total assets as the basis where as ROE considers only the owners’ Equity as the basis of profitability.

Return on Assets (ROA) is a financial ratio that shows the percentage of profit a company earns in relation to its overall resources. It is commonly defined as net income divided by total assets. Net income is derived from the income statement of the company and is the profit after taxes.

$$ROA = \text{NET INCOME} / \text{TOTAL ASSET}$$

NPLR and CAR were used because these two are the indicators of credit risk management which affect the profitability of banks. Nonperforming Loan Ratio (NPLR), in particular, indicates how banks manage their credit risk because it defines the proportion of NPL amount in relation to TL amount. NPLR is defined as NPLs (non performing loan) divided by TLs (total loan).

$$NPLR = \text{NPL} / \text{TL}$$

Where

NPLR means Non Performing Loan Ratio
TL means Total Loan

NPLR, in particular, indicates how banks manage their credit risk because it defines the proportion of NPL amount in relation to TL amount. NPLR is defined as NPLs divided by TLs.

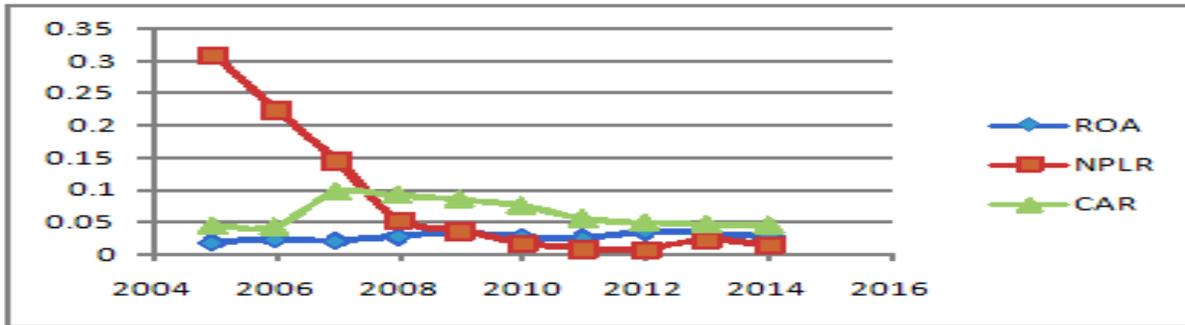
Capital Adequacy Ratio (CAR) is a specialized ratio used by banks to determine the adequacy of their capital keeping in view their risk exposures. Banking regulators require a minimum capital adequacy ratio so as to provide the banks with a cushion to absorb losses before they become insolvent. CAR is a measure of the amount of a bank’s capital expressed as a Percentage of its risk weighted credit exposures.

$$\text{Capital adequacy ratio} = \text{Capital} / \text{Risk}$$

Analysis of Data

Descriptive analysis of commercial banks in Ethiopia

The relationship between credit risk management and profitability at CBE



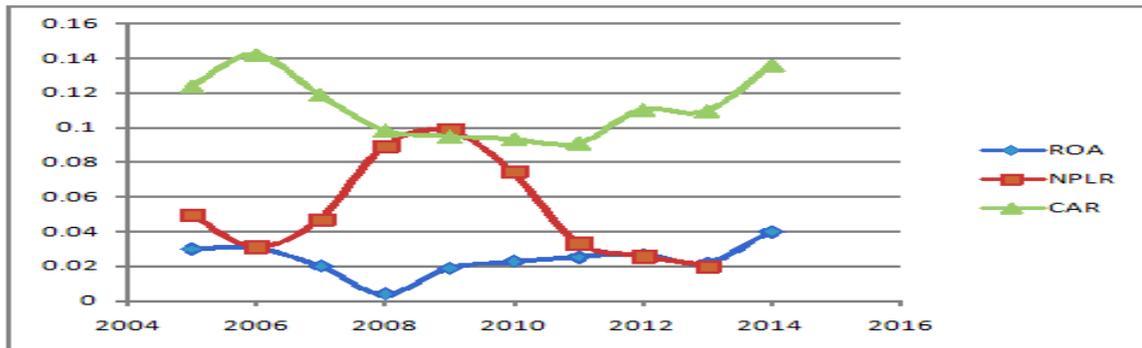
Graph 1: Scatter diagram for ROA, CAR AND NPLR OF Commercial bank of Ethiopia

Inferences from the above graph

- When NPLR reaches its maximum at (30.9%), ROA reaches its minimum at (1.72%). This means that the NPLR has significant affect on Profitability of CBE.
- We can observe that the decrease in NPLR from 2005 shows an increase in the ROA, which means that there is inverse relation between them.

- CAR of commercial bank of Ethiopia indicate normal trend throughout the years and its affect is also nominal on ROA.

The relationship between credit risk management and profitability at BOA



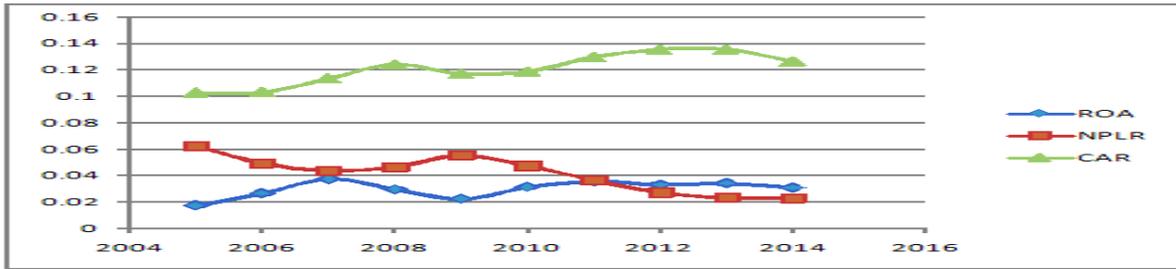
Graph 2: Scatter diagram for ROA, CAR & NPLR OF Bank of Abyssinia

From the above graph we can observe the trend of ROA, NPLR & CAR for Bank of Abyssinia.

- During 2009 NPLR reaches its maximum with 9.8 % and the ROA is at its decrease by which it is understood that the NPLR and ROA have inverse relation.
- NPLR shows a zigzag trend from 2005-2007. It has decreased initially from 2008 & 2009 it increases at an increasing rate and finally from 2010-2014 it decreases at an increasing rate. In recent years the trend shows BOA has managed its NPLR.

- We can also observe that when the number of NPLR reaches its maximum the ROA reaches its minimum from our sample of 10 years of data.
- ROA is greater than NPLR from year 2013 this shows BOA have managed its default loans properly.
- It is observed that CAR has nominal impact on ROA.

The relationship between credit risk management and profitability at AIB



Graph 3: Scatter diagram for ROA, CAR & NPLR of Awash International Bank

From the above graph we can observe the relation between ROA, NPLR & CAR of Awash international Bank

- Like other banks, AIB have bad NPLR from (2005-2010) years but it decreases continuously from (2011-2014) as per the above graph.
- ROA is below NPLR from (2005-2010) and above NPLR from (2011-2014) this indicates that Awash

International Bank have managed its NPLR properly during these years.

- CAR of Awash International Bank has little impact on ROA as per the above graph.

The relationship between credit risk management and profitability at NIB



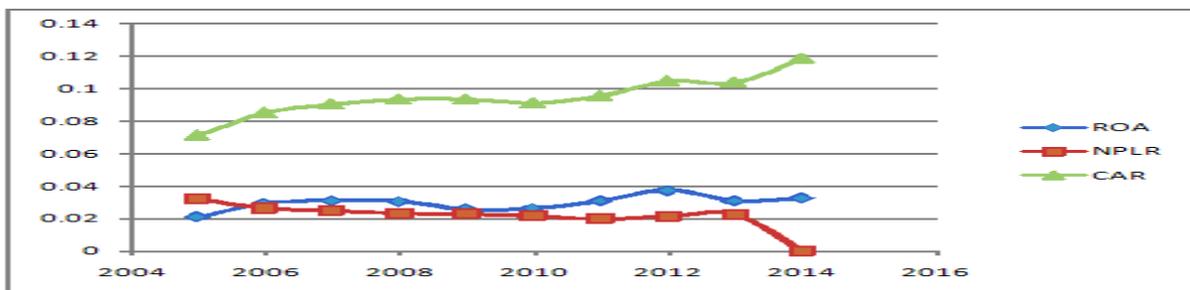
Graph 4: Scatter diagram for ROA, CAR & NPLR of Nib International Bank

The above graph shows the relation between ROA, CAR&NPLR of Nib International Bank

- NIB has relatively lower NPLR when compared to that of the other banks.

- From (2005-2010), NPLR is above ROA and from (2011-2014) ROA is greater than NPLR. NIB has managed its default loan properly.
- CAR of NIB are very high like other private banks

The relationship between credit risk management and profitability at DB



Graph 5: Scatter diagram for ROA, CAR & NPLR of Dashen bank

The above graph shows the relation between ROA, CAR&NPLR of Dashen bank

- Dashen Bank NPLR is low from year (2006-2014). This shows that the bank managed loans properly. It should be a good example for other banks regarding Loan management. We can also

observe that the decrease in NPLR is causing increase in ROA.

- CAR of Dashen is high and has less impact on ROA like other private banks.

Findings of Data Analysis

- This study showed that there is a significant relationship between performance (in terms of profitability) and the amount of non Performing Loans (in terms of loan performance and Capital adequacy). The results of the analysis states that NPLR have negative and significant effect whereas CAR have positive and relatively insignificant effect on ROA, with NPLR having higher significant effect on ROA in comparison to CAR.
- NPLR and CAR explain the credit risk management on the performance of selected institutions. Since banks take deposits and use the same to advance loans the costs associated with these loans e.g. insurance costs reduces the profitability margins of the bank increases.
- Return on equity (ROA) measures the ability of the bank management to generate income by utilizing company assets at their disposal. Therefore increased portfolio risk will reduce the revenue aspect and increase the cost associated as indicated by the analysis of Nonperforming loans.

Summary of findings

- Non Performing loan ratio has negative impact where as the capital adequacy ratio have positive impact on profitability of commercial banks in Ethiopia.
- The impact level of Non Performing Loan Ratio is negative which means that the increase in NPLR leads to decrease in the profitability of commercial banks of Ethiopia
- Non Performing Loan Ratio has inversely related to profitability whereas capital adequacy ratio has a direct relation with profitability of the banks.
- The impact level of capital adequacy ratio has been positive; it indicates that the increase of Capital Adequacy Ratio leads to increase in profitability of commercial banks of Ethiopia.

Conclusions and Recommendations

Based on the main objective of this study which is to assess the impact of credit risk management on the performance of selected commercial banks in Ethiopia, for the sample period from 2005 to 2014 the following recommendations can be made.

- The study concluded that NPLR has a significant effect on the level of ROA.
- Nonperforming Loan Ratio has a negative impact on the other hand capital adequacy ratio has

positive impact on profitabilities of selected commercial banks in Ethiopia.

- Finally, we can conclude that the NPLR has significant affect on the Profitability where as the CAR has insignificant affect on the Profitability of the commercial Banks. So H1 is accepted and H2 is rejected.

Recommendations

Based on the findings and conclusions of the study the following recommendations can be given.

- The bank management needs to be cautious in setting up a credit policy that will not negatively affect profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit.
- Banks should establish credit policies and standards that conform to regulatory requirements and the banks' overall objectives to further reduce the level of their credit risk exposure.
- This study could be further developed by including more factors that affect the profitability.
- It is better if this study is supplemented with qualitative study of credit risk management so that the findings would be more objective and informative.
- Performance indicator could be developed by adding other relevant dependent variable to grasp the whole variations in performance.
- Finally the study suggests that a further study should be done on the impact of credit risk management on different aspects of banks' activity by applying the upcoming softwares like SPSS, Strata and R.

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