

ST. MARY'S UNIVERSITY
FACULTY OF BUSINESS
DEPARTMENT OF ACCOUNTING

AN ASSESSMENT OF FINANCIAL PERFORMANCE
IN THE CASE OF OROMIA INTERNATIONAL BANK

BY
ADEM JIRU
AHMED JIBREL
KUMLACHEW TESFAYE

JUNE, 2014
ADDIS ABABA

**AN ASSESSMENT OF FINANCIAL PERFORMANCE
IN THE CASE OF OROMIA INTERNATIONAL BANK**

**A SENIOR RESEARCH SUBMITTED TO THE
DEPARTMENT OF ACCOUNTING
BUSINESS FACULTY
ST.MARY'S UNIVERSITY**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
DEGREE OF BACHELOR OF ARTS IN ACCOUNTING**

BY

ADEM JIRU

AHMED JIBREL

KUMLACHEW TESFAYE

ADVISOR

AHMED MOHAMMED

June 2014

ST. MARY'S UNIVERSITY
FACULTY OF BUSINESS
DEPARTMENT OF ACCOUNTING

AN ASSESSMENT OF FINANCIAL PERFORMANCE
IN THE CASE OF OROMIA INTERNATIONAL BANK

BY
ADEM JIRU
AHMED JIBREL
KUMLACHEW TESFAYE

APPROVED BY BOARD OF EXAMINERS

DEPARTMENT HEAD

SIGNATURE

ADVISER

SIGNATURE

INTERNAL EXAMINER

SIGNATURE

EXTERNAL EXAMINER

SIGNATURE

ACKNOWLEDGMENT

First we would like to thank our advisor Ato Ahmed Mohammed for his unreserved advice for the completion of this paper. In addition, our thanks goes to the managements and staff members of Accounts and Treasury section and Planning and business development section of OIB specially to Ato Mesfin Yohannes, manager of Accounts division of OIB, for their unreserved support to provide data for the study unless and otherwise it would not have completed successfully.

Last but not least we warmly acknowledged the contribution of our department head Ato Mesert Kinfe for his effort to bring this study into reality.

Table of Contents

	Page
ACKNOWLEDGMENT.....	i
CHAPTER ONE.....	1
INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.2 Statement of the Problem.....	3
1.3 Basic Research Questions.....	4
1.4 Objective of the Study.....	4
1.5 Significance of the Study.....	5
1.6 Scope of the Study.....	5
1.7 Research Design and Methodology.....	5
1.7.1 Research Design.....	5
1.7.2 Population and Sampling Techniques.....	5
1.7.3 Types of Data to be collected.....	6
1.7.4 Methods of Data Collection.....	6
1.7.5 Methods of Data Presentations and Analysis.....	6
1.8 Limitation of the Study.....	7
1.9 Organization of the Study.....	7
CHAPTER TWO	8
REVIEW OF RELATED LITERATURE.....	8
2.1 Theoretical Review.....	8
2.1.1 Financial Accounting	8
2.1.2 Financial Performance Analysis	8
2.1.3 Financial Statements.....	9
2.1.4 Tools of Analysis and Interpretations	9
2.1.5 Nature of Ratio Analysis.....	10
2.1.6 Types of Ratios.....	10
2.1.7 Selected Performance Measurement Ratios	10
2.1.7.1 Profitability performance.....	10

2.1.7.1.1	Return on Equity.....	12
2.1.7.1.2	Return on Asset.....	12
2.1.7.1.3	Equity Multiplier.....	12
2.1.7.1.4	Asset Utilization.....	13
2.1.7.1.5	Net Profit Margin.....	13
2.1.7.2	Liquidity performance.....	13
2.1.7.2.1	Liquid Asset to average total assetratio.....	14
2.1.7.2.2	Liquid asset to deposit.....	14
2.1.7.2.3	Net Loan to Deposit and Short TermBorrowing Ratio.....	14
2.1.7.3	Credit/asset/ quality performance.....	14
2.1.7.3.1	Percentage of Loan Loss Provision.....	14
2.1.7.3.2	Net non Performing Assets to NetLoan and Advance.....	15
2.1.7.4	Operating efficiency Performance.....	15
2.1.7.4.1	Expense to Total income.....	15
2.1.7.4.2	Overhead efficiency ratio.....	15
2.1.7.4.3	Net Interest Margin.....	15
2.1.8	Limitations of Ratio Analysis.....	15
2.2	Empirical Study.....	16
2.2.1	Banking in Ethiopia.....	16
2.2.2	Previous research on bank performance	17
CHAPTER THREE.....		20
DATA PRESENTATION AND ANALYSIS.....		20
3.1	Profitability performance	20
3.1.1	Return on Equity.....	20
3.1.2	Return on Asset.....	22
3.1.3	Equity Multiplier	23
3.1.4	Asset Utilization.....	24
3.1.5	Net Profit Margin.....	26
3.2	Liquidity performance.....	28
3.2.1	Liquid Asset to average total asset ratio.....	28
3.2.2	Liquid asset to deposit and short-term borrowing.....	29
3.2.3	Net Loan to Deposit and Short Term Borrowing Ratio.....	30

3.3	Credit/Asset/ quality performance.....	32
3.3.1	Percentage of Loan Loss Provision.....	32
3.3.2	Net Non-performing Assets to Net Loan & Advance.....	33
3.4	Operating Efficiency Performance.....	35
3.4.1	Expense to Total income.....	35
3.4.2	Overhead efficiency ratio.....	36
3.4.3	Net Interest Margin.....	37
CHAPTER FOUR.....		39
SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION.....		39
4.1.	Summary of Major Findings.....	39
4.2.	Conclusion.....	41
4.3.	Recommendation.....	43
Bibliography.....		I
APPENDICES		I

List of Table

	Page
Table 3.1: Return on Equity Ratio of OIB.....	21
Table 3.2: Return on Asset Ratio of OIB.....	22

List of Figures

	Page
Figure 3.1: Return on Equity Trend.....	21
Figure 3.2: Return on Asset Trend.....	23
Figure 3.3: Equity Multiplier Trend.....	24
Figure 3.4: Asset Utilization Trend.....	25
Figure 3.5: Net Profit Margin Trend.....	26
Figure 3.6: Liquid Asset o Average Total Asset Trend.....	28
Figure 3.7: Liquid Asset to Deposit and Short term Borrowing Trend.....	29
Figure 3.8: Net Loan to Deposit and Short term Borrowing Trend.....	31
Figure 3.9: Percentage of Loan loss Provision Trend.....	33
Figure 3.10: Net Non Performing Asset to Net Loan and Advance Trend.....	34
Figure 3.11: Expense to Total Income Trend.....	35
Figure 3.12: Overhead Efficiency Trend.....	37
Figure 3.13: Net Interest Margin Trend.....	38

List of Appendices

Appendix I: Interview questions presented to the Banks' Management Officials	
Appendix II: Financial ratios related with Profitability Performance.....	
Appendix III: Financial ratios related with Liquidity Performance.....	
Appendix IV: Financial ratios related with Asset Quality Performance.....	
Appendix V: Financial ratios related with Operating Efficiency Performance.....	
Appendix VI: Audited Balance Sheet and Profit and Loss Statement of OIB.....	

List of Acronyms

AU	Asset Utilization Ratio
CB's	Commercial Banks
CBE	Commercial Bank of Ethiopia
EM	Equity Multiplier Ratio
LAATA	Liquid Asset to Average Total Asset Ratio
LADST	Liquid Asset to Deposit and Short Term Borrowing Ratio
NBE	National Bank of Ethiopia
NIM	Net Interest Margin Ratio
NLDST	Net Loan to Deposit and Short Term Borrowing Ratio
NLTA	Net Loan to Total Asset Ratio
NPM	Net Profit Margin Ratio
OIB	Oromia International Bank
PCB	Private Commercial Bank
ROA	Return on Asset Ratio
ROE	Return on Equity Ratio

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The financial institution or banks are the crucial ways not only for financing activities but also provides all types of activities related to finance. The main thing in the mind of financial performance researcher and learner is that increasing financial performance is the way to improve financial activities. Financial performance of financial institutions is well advanced in its measurement within the field of finance and management. And these financial institutions are constituent of good financial system and assist the investors to obtain capital and money market in a country (Munir et al, 2012).

Unlike other private corporations commercial banks (CBs) are unique in the special service they offer starting from the smallest service mobilizing deposit, lending of money, remittance service, and international banking service up to the top one assistance in the implementation of monetary policy. In addition to that CBs are unique in the level of regulatory attention they receive, they are highly regulated and also unique in the type of assets and liabilities they hold. Like any for profit organization, however, the ultimate measure of a CBs performance is the value of its common equity to its shareholders. Therefore, at the time of performance evaluation special treatment and considerations should have to be taken for CBs.

Measures of financial performance reduce a large amount of information into a convenient form for analysis. No single measure of financial performance is adequate for evaluating CBs. Evaluation of several financial measures may be more useful in directing the researcher to ask the right questions than in providing solutions to the financial problems of the business. Both the magnitude of the measure and its relationship to other measures should be evaluated.

Investopedia defines performance as the result of activities of an organization or investments over a given period of time. Performance can be measured in financial and non financial terms. Financial performance measures the results of a firms operation in monetary terms where as non financial performance is all measurements other than financial results of a firm. The main focus

of this study is in the financial performance and the non financial measures of performance are not the concern of the study.

According to Ginevicius et al (2011) financial performance analysis is the process of determining the operating and financial characteristics of a firm from accounting and financial statements. The goal of such analysis is to determine the efficiency and performance of firm's management, as reflected in the financial records and reports.

The ability of an organization to analyze its financial position is essential for improving its competitive position in the marketplace. Through a careful analysis of its financial performance, the organization can identify opportunities to improve performance of the department, unit or organizational level (Ginevicius et al, 2011).

Financial analysts often assess the firm's liquidity, solvency, efficiency, profitability, operating efficiency and financial stability in both short-term and long-term (Ginevicius et al, 2011).

Ratio analysis provides relative measures of the company's performance and can indicate clues to the underlying financial position. For measuring financial position and financial efficiency, appropriate level of financial performance indicators are required with whom comparison can be made. Generally liquidity ratio, debt equity ratio, interest coverage ratio, inventory turnover ratio, return on investment ratio and debt to net worth ratio are highly useful in determining financial position, financial performance and the financial stability or otherwise of such management (Ginevicius et al, 2011).

The objectives of proposed study of assessment of financial performance was to examine possible relationships among and between balance sheet and statement of profit and loss items in order to provide tangible outputs regarding strength and weaknesses of OIB within the study period. The results of this study will provide important information about the financial position of OIB in related with profitability, liquidity, asset quality, and operating efficiency with in the study period.

1.2 Statement of the Problem

Assessment of financial performance is highly useful to identify the financial strengths and weaknesses of the firm by properly establishing the relationship between the items of balance sheet and profit and loss account (Drake, 2010). It also helps in short-term and long-term forecasting and growth can be identified with the help of a financial performance analysis. Moreover, bank performance assessment can also help improve managerial performance by identifying best and worst practices associated with high and low measured efficiency.

However, according to Drake failures of commercial banks have been relatively high in recent years in all over the world while the reason of each bank failure is somewhat unique experiences, which differ from one bank to another. Recent studies have identified a few factors that most failing banks seem to have in common. From those factors the main are problem regarding loan portfolio, management efficiency, and uncontrollability of operating expenses. Besides, Non performing loans grow to such an extent that revenues fall off and loan loss expenses as well as operating expenses absorb all the earnings that remain. In addition to that failing banks often have inadequate system of spotting loan problem early and frequently have expense control problem.

When we came to in the case of OIB, the bank is computing strongly in the industry specially on mobilizing higher amount of deposit. Addis Fortune magazine [VOL 13, No 654] states about the bank with a title of ‘OIB mobilizes significant deposits within a challenging environment’ that ‘the bank mobilizes significant deposits within a challenging environment at a time when most of the private banks in Ethiopia are witnessing their deposit mobilization sources drying up.’” Addis Fortune continues and states that the banks return on average equities is lower than few years back and also indicates there are uncontrolled expenses which minimize the earning of the bank.

This statement on Addis Fortune about the performance of the bank leads the researchers as indices to take a preliminary study on the performance evaluation of the bank. In the preliminary study we can look that the profitability of the bank is inconsistent, the proportion of liquid asset from the overall total asset is rapidly declining, and the bank’s ability to cover noninterest expenses by non interest income is also weak. Besides, provision for loan loss and non performing loan grow at a higher rate.

Therefore, this study attempts the evaluation of the financial performance of OIB in terms of four performance measurement ratios: i.e. Profitability performance, Liquidity performance, Credit /asset/ quality performance, and Operating efficiency performance within the period 2009/2010 - 2012/2013.

1.3 Basic Research Questions

The basic research questions that should be answered by this study were as follows:

1. How does the profitability of the bank under the study period?
2. How does the operating efficiency of the bank under the study period?
3. How does the ability of the bank to meet maturing financial obligation under the study period?
4. How does banks management efficiency to employ the asset so as to generate revenue?

1.4 Objective of the Study

General Objective

The general objective of the study was to assess the financial performance of OIB through financial statement analysis of four year audited financial statements.

Specific Objective

For the achievement of the general objective, the specific objectives was

- To interpret the profitability performance of the bank activities with the help of profit and loss statement
- To evaluate the improvement in the operating performance of the bank over the study period
- To evaluate the ability of the bank to meet maturing financial obligation under the study period
- To measure the efficiency of the banks management in using its various assets for generating revenue

1.5 Significance of the Study

The researcher hope that this analytical research will play its part in giving attention to the financial performance of the bank, to the bank management as well as users of the financial statements. Also it will be useful for the management on setting of and selection of appropriate financing and operating strategies to be competent in the banking industry. In addition to that, it helps the researchers to employ their theoretical knowledge in to practice. Besides, the study and frame work designed to evaluate the financial performance of commercial banks will be expected to serve as an input for future researchers interested in the financial industry.

1.6 Scope of the Study

The study was conducted with the help of data obtained from audited financial statements. The audited financial statements are the bank's annual reports of four year from 2009/2010 - 2012/2013 and the audited financial records are obtained from the company annual report. The fact that industry average could not be included in the study constrains the validity of the study. However, the researchers believed that the four year bank performance from the audited annual report offers comprehensive information about the financial performance of OIB. In addition to that, the researchers try to measure the performance of the bank in terms of financial wealth and non financial measurements of performance are not included in the study.

1.7 Research Design and Methodology

1.7.1 Research Design

This paper uses descriptive financial ratio analysis to measure, describe and analyze the financial performance of OIB during the study period. The data was obtained from the audited annual report of the bank, Britu magazine (which is prepared by national bank of Ethiopia) and OIB's website.

1.7.2 Population and Sampling Techniques

Even if the study was mainly incorporated with the annual reports of the bank, the researcher uses primary as well as secondary source of data collection methods. The population in this study incorporates ten top management officials in the planning and business development section and the accounts and treasury section, which are key for preparation and interpretation of financial statements and making of decision about the future based on financial statements.

The researchers assumed a sample of two top management officials from a total of ten populations. Here, the technique of sampling was purposive.

The researcher's intention to use purposive sampling for the population is due to the quality of information obtained from the samples. In addition to this, such individuals were being part of top management and also have sufficient financial knowledge.

1.7.3 Types of Data to be collected

Although the study was mainly focused on historical data, which is based on an analysis of previous year financial statements, it incorporates both primary and secondary data. Secondary data are data related with financial reports which are useful for measurement of financial performance of the bank. On the other hand primary data are data related with the opinion of top management regarding the outcomes of computed ratio.

1.7.4 Methods of Data Collection

Secondary data was collected through company reports, audited financial statements, magazines and annual published materials. On the other hand primary data was collected through unstructured interview with sample of top management officials from the planning and development section and investment and accounts section of the bank.

The main objective of preferring unstructured interview is to find facts depending on the situation encountered at the time of interview. If it was structured the possibility of getting facts is lesser whereas there is a possibility of generating new ideas relying upon the respondent's initiation in unstructured interview. Incorporation of facts from secondary sources was useful to generate tangible evidences about the financial performance condition of the bank.

1.7.5 Methods of Data Presentations and Analysis

After relevant data regarding the bank are collected or obtained, the researchers compute various financial ratios which the researchers believe measure the financial performance of the bank. The financial ratios as a measure of financial performance were grouped and presented into four performance conditions as follows;

- Profitability performance
- Liquidity performance
- Credit /Asset/ Quality performance

Operating efficiency performance

Next to that, the researchers report the outcome of their finding based on the analysis of four years financial statements and unstructured interview held with selected officials of the bank. In the process the collected primary as well as secondary data values are edited, summarized, categorized and possible generalization and inferences was made by the researchers. The researchers use the descriptive data analysis technique to analyze the outcome of the study and are presented as a ratio in the form of tables (as per annexed) and graphs.

Here, the researchers try to minimize premature conclusions and interpretations as well as great care was taken in the data processing. Lastly, professional assessment was made on the analysis to interpret existing conditions and to show a direction for what must be done next.

1.8 Limitation of the Study

The study is restricted for a period of four year and it doesn't involve both comparing with other commercial banks which are operating in the banking industry and comparing with the industry average. Another limitation of this study is that the performance of the bank is measured in financial terms and non financial measurements of performance are not included. Regarding analysis of financial statements, the research is made based on ratio analysis. Finally, the study exclusively depends on the published audited financial data, so it is subject to all limitations that are inherent in the condensed published financial statements.

1.9 Organization of the Study

This paper was organized in four main chapters; the first chapter is introduction which gives a general aim, coverage, scope and other basic issue of the paper. The second chapter deals with literature review which includes related theoretical literature reviews. In this chapter concepts that are related with financial performance analysis are reviewed. The third chapter is data analysis and interpretation. In this chapter the secondary as well as primary data was analyzed and interpreted. This chapter also presents analysis and interpretation of the findings. The final chapter is summery, conclusion and recommendation. In this last chapter conclusion and recommendation regarding the findings of the research are presented briefly.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

The literature review has two main parts, Theoretical Review and empirical review. The first part begins with a discussion of the related theories and concepts from a broad perspective. It then deals with more and more specific which focus increasingly on the specific question at hand. In the second part of the review, the researchers try to summarize previous studies related with financial performance evaluation of commercial banks done by both foreign and local researchers.

2.1 Theoretical Review

2.1.1 Financial Accounting

Financial accounting is the process that culminates in the preparation of financial reports on the enterprise for use by both internal and external parties. Users of these financial reports include investors, creditors, managers, unions, and government agencies (Kieso, et al 2012: 1549).

Financial accounting is the process of systematic recording of the business transactions in the various books of accounts maintained by the organization with the ultimate intention of preparing the financial statement there from. These financial statements are basically presented in two forms. One, profitability statement which indicates the result of operations carried out by the organization during a given period of time and second balance sheet which indicates the state of affairs of the organization at any given point of time in terms of its assets and liabilities (Drake, 2010). Main purpose of financial accounting is to ascertain profit or loss and to indicate financial position of an enterprise. Two fundamental statements of financial accounting are income and expenditure statement and balance sheet.

2.1.2 Financial Performance Analysis

According to Drake (2010), financial statement analysis is the selection, evaluation, and interpretation of financial data, along with other pertinent information, to assist in investment and financial decision-making.

Moreover, it is also the process of identifying financial strengths and weaknesses of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account. It also helps in short-term and long-term forecasting and growth can be identified with the help of financial performance analysis (Drake, 2010).

The analysis of financial statement is a process of evaluating the relationship between the component parts of financial statement to obtain a better understanding of the firm's position and performance. This analysis can be undertaken by management of the firm or by parties outside the namely, owners, creditors, and investors Thus financial analysis helps to highlight the facts and relationships concerning managerial performance, corporate efficiency, financial strength and weakness, and credit worthiness of the company (Kieso, et al 2012: 1549).

2.1.3 Financial Statements

Financial Statement refers to formal and original statements prepared by a business concern to disclose its financial information. According to John.N.Meyer (2008) the financial statement provides summary of accounts of a business enterprise, the balance sheet reflecting assets, liabilities and capital as on a certain date and the income statement showing the result of operation during a certain period”.

The financial statements are prepared with a view to depict the financial position of the concern. They are based on the recorded facts and are usually expressed in monetary terms. The financial statement are prepared periodically that is generally for the accounting period.

The term financial statement has been widely used to represent two statements prepared by accountants at the end of specific period. They are: Profit and loss account or income statement and Balance sheet or statement of financial position.

2.1.4 Tools of Analysis and Interpretations

In analyzing financial statement data, analysts use various devices to bring out the comparative and relative significance of the financial information presented. These devices include ratio analysis, comparative analysis, percentage analysis, and examination of related data. No one device is more useful than another. Every situation is different, and analysts often obtain the needed answers only upon close examination of the interrelationships among all the data provided. Ratio analysis is the starting point (Kieso, et al 2012).

2.1.5 Nature of Ratio Analysis

Ratio analysis is the process of determining and interpreting numerical relationship based on financial statements. It is the technique of interpretation of financial statements with the help of accounting ratios derived from the balance sheet and profit and loss account (Thukaram, 2006).

Ratios are indicators; sometimes they serve as pointers but not in themselves powerful tools of management. The ratios help to summarize the large quantities of financial data and to make qualitative judgment about the firm's financial performance (Thukaram, 2006).

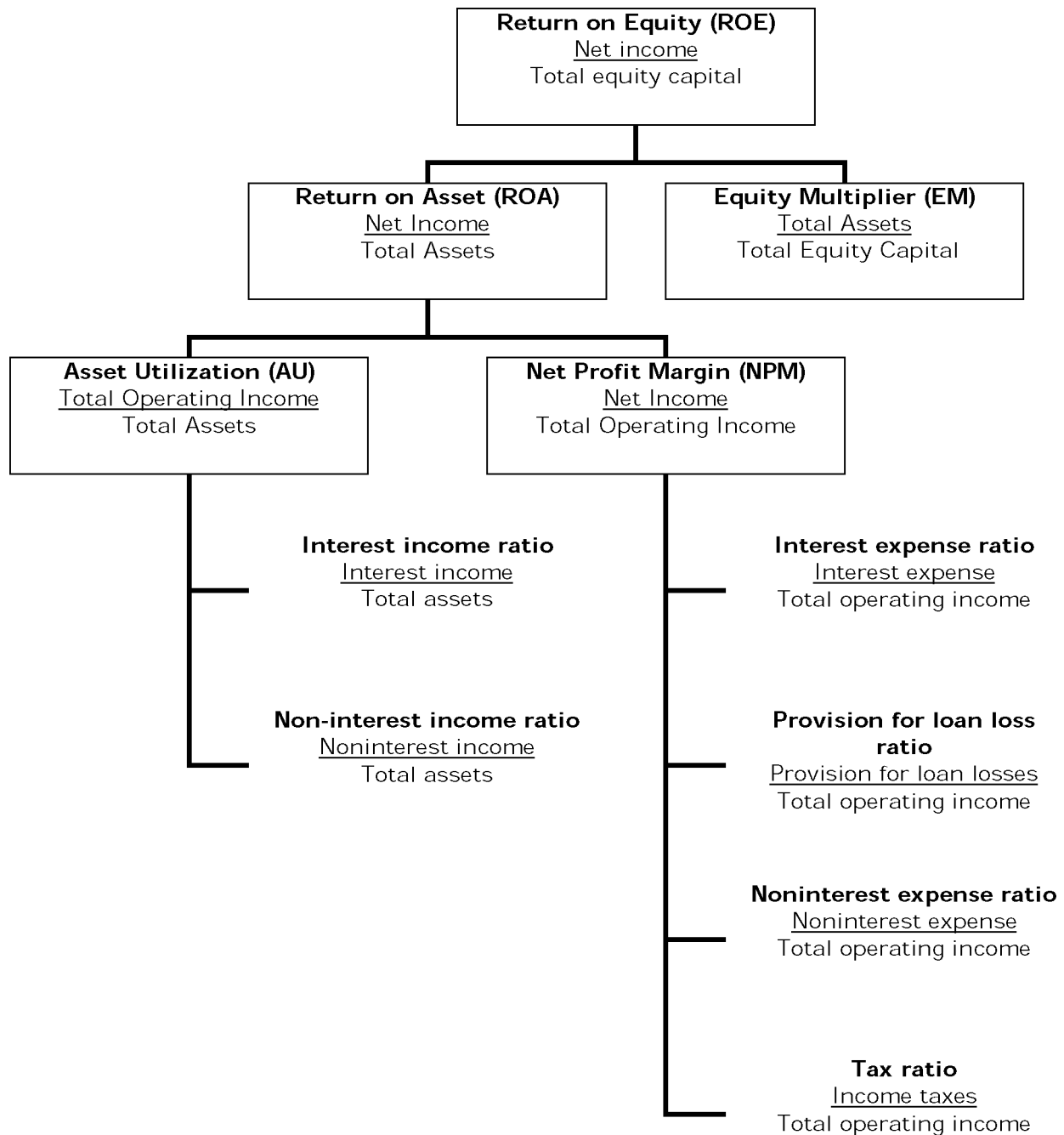
2.1.6 Types of Ratios

According to Fraser and Ormiston (2004) there are four categories of ratios used in financial statement analysis. These are: (1) liquidity ratios, which measure a firm's ability to meet cash needs as they arise; (2) activity ratios, which measure the liquidity of specific assets and the efficiency of managing assets; (3) profitability ratios, which measure the overall performance of a firm and its efficiency in managing assets, liabilities, and equity; (4) leverage ratios, which measure the extent of a firm's financing with debt relative to equity and its ability to cover interest and other fixed charges.

2.1.7 Selected Performance Measurement Ratios

2.1.7.1 Profitability performance

The profitability performance of OIB is assessed based on Return on Equity framework. The ROE framework starts with the most frequently used measure of profitability, ROE, and then breaks it down for convenient and systematic way to identify strengths and weaknesses in a bank's profitability performance. Identification of strengths and weaknesses, and the reasons for them provides an excellent tool for researchers as means to look profitability performance. The role of ROE and the breakdown of the ROE framework is summarized in the next chart.



Flow chart 1: ROE framework

Among the most important ratio measures of profitability, the following will be presented separately;

- Return on equity (ROE), is a measure of the rate of return flowing to shareholders.

- Return on assets (ROA), is primarily an indicator of managerial efficiency; it indicates how capable management has been in converting assets into net earnings.
- Equity multiplier (EM), is a measure of leverage or financing policies: sources chosen to fund the financial institution (debt or equity).
- Asset utilization (AU), is a measure of portfolio management policies, especially the mix and yield on assets. And
- Net profit margin (NPM), is a measure of effectiveness of expense management (cost control) and service pricing policies.

If any of these ratios begins to decline, management needs to pay close attention and assess the reasons behind that change.

2.1.7.1.1 Return on Equity

ROE is the most important indicator of a bank's profitability and Growth Potential. It measures the amount of net income after taxes earned for each Birr of equity capital contributed by the banks stockholders. Higher ROE increases the price of shares in the capital market and shareholders also expect higher dividend distribution (Thukaram, 2006).

2.1.7.1.2 Return on Asset

Return on Asset determines the net income produced per Birr of assets and useful to measure profitability linked to the asset size of the bank. In other way, it can be expressed as net earnings per unit of a given asset which shows the conversion of banks assets into profit. Higher return on asset is appreciated and favorably considered by the owners of the banks. On the other hand, it is usually affected by disposal and acquisition of asset. When the level of asset increase, it is likely that ROA will decrease and vice versa. Unlike other business organizations, assets of the bank are financial in nature, like loan and Treasury bills (Thukaram, 2006).

2.1.7.1.3 Equity Multiplier

It shows how much the bank is leverage and measures the Birr value of assets funded with each dollar of equity capital. The higher the equity multiplier ratio, the more leverage or debt the bank is using to fund its assets and its solvency risk has increased (Thukaram, 2006)

2.1.7.1.4 Asset Utilization

Asset Utilization measures the bank's ability to generate income from its assets. The more income generated per Birr of assets, the more profitable the bank (Thukaram, 2006). For suitability of the study the researchers' breakdown AU ratio as interest income and non interest income generated per dollar of total assets. The interest income and non-interest income ratios are not necessarily independent for example, the bank's ability to generate loans affect both interest income and, through fees and service charges, non interest income. High values for these ratios signify the efficient use of bank resources to generate income and are thus generally positive for the bank (Thukaram, 2006).

2.1.7.1.5 Net Profit Margin

It measures the net income generated per birr of total operating income, which is composed of interest and non interest income. In addition to that profit margin measures the bank's ability to control expenses. The better expense control, the more profitable the bank. It is often far-sighted to break these ratios down (Thukaram, 2006).

2.1.7.2 Liquidity performance

Banks must be capable of meeting their obligations when they fall due. If the depositors or other lenders do not have confidence that the claims can be met, they will stop depositing or lending funds to the bank. The acquisition of deposits and other funds is a necessary condition for the expansion of loans and investments beyond the amount permitted by the use of equity only. Maintaining adequate liquidity is a key constraint on the bank's profit-making capacity. Liquidity ratios provide the primary means of judging a bank's liquidity position. Norms for liquidity ratios of business firms are possible because their liabilities are predictable due to their fixed maturities (Mabwe.K and Robert.W, 2010).

For banks, there are no universally recognized liquidity ratios as a large percentage of their liabilities (e.g. deposits) are due on demand. Nevertheless the following ratios can be used as partial indicators. Therefore, the liquidity of OIB is measured based on liquid asset to average total asset ratio, liquid asset to deposit, and loan to deposit ratio.

2.1.7.2.1 Liquid Asset to average total asset ratio

Liquid asset to total asset ratio is a direct method of assessing the liquidity of bank in terms of the overall total asset. Here a higher ratio indicates a higher liquidity proportion and a lower ratio indicates small portion of liquid asset from the overall total assets. In general it gives an indication of how much of the bank asset are tied in to liquid assets. It is the reverse of loan to total asset ratio, which measures the amount of bank asset tied up by illiquid assets (Mabwe.K and Robert.W, 2010).

2.1.7.2.2 Liquid asset to deposit

Liquid assets to deposit and short term borrowing ratio (LADST) is additional direct method of assessing the liquidity of bank which indicate the percentage of short term obligations that could be met with the bank's liquid assets in the case of sudden withdrawals (Mabwe.K and Robert.W, 2010).

2.1.7.2.3 Net Loan to Deposit and Short Term Borrowing Ratio

Net loan to deposit and short term borrowing ratio indicates the percentage of the total deposits locked into non-liquid assets. A high figure denotes lower liquidity (Mabwe.K and Robert.W, 2010).

2.1.7.3 Credit/asset/ quality performance

Credit performance is concerned with examination of the risk associated with a bank's asset portfolio. Credit performance evaluates the risks associated with the bank's asset portfolio i.e. the quality of loans issued by the bank (Thukaram, 2006). Several ratios can be used for measuring credit quality however, not all information on the loans is always available. Therefore this paper uses percentage of loan loss provision and net non performing assets to net loan and advance ratios.

2.1.7.3.1 Percentage of Loan Loss Provision

This ratio indicates the proportion of the total portfolio that has been set aside but not charged off. It is a reserve for losses expressed as a percentage of total loans. Provision for loan losses item represents the bank management's prediction of loans at risk of default for the period. While the loans remain on the banks balance sheet, the expected losses from any bad loans affect

net income and equity on the income statement and balance sheet, respectively (Thukaram, 2006).

2.1.7.3.2 Net non Performing Assets to Net Loan and Advance

Net non-performing assets to net loan and advance show the proportion of non-performing loans from the total loan and advance granted by the bank (Thukaram, 2006).

2.1.7.4 Operating efficiency Performance

The performance of management capacity is usually qualitative and can be understood through the objective evaluation of management systems, organizational culture, control mechanism, and so on. However the capacity of the management of a bank can also be weighed with the help of certain ratios of offsite evaluation of a bank. The capacity of the management to deploy its resources, to maximize the income aggressively, to utilize the facilities in the bank productivity, and to reduce costs can be measured using financial ratios (Purohit, 2003).

2.1.7.4.1 Expense to Total income

It measure the cost incurred per birr of income. In other way, it measures the income generated per birr cost. That is how expensive it is for the bank to produce a unit of output. If the cost to income ratio is lower, better performance will be achieved (Thukaram, 2006).

2.1.7.4.2 Overhead efficiency ratio

Overhead efficiency measures the bank's ability to generate non-interest income to cover non-interest expenses. In general the higher this ratio, it will be better to cover non-interest expenses. However, because of the high levels of non-interest expenses relative to non interest income, overhead efficiency is rarely higher than one (Mabwe.K and Robert. W, 2010).

2.1.7.4.3 Net Interest Margin

The ratio Net interest margin shows the net return per banks earning assets which are investment securities and loans and leases (Thukaram, 2006).

2.1.8 Limitations of Ratio Analysis

Ratio analysis is a widely used and useful technique to evaluate the financial position and performance of any business unit but it suffers from a number of limitations. According to Kieso,

et al (2012) the reader of financial statements must understand the basic limitations associated with ratio analysis. As analytical tools, ratios are attractive because they are simple and convenient. But too frequently, decision-makers base their decisions on only these simple computations. The ratios are only as good as the data upon which they are based and the information with which they are compared.

One important limitation of ratios is that they generally are based on historical cost, which can lead to distortions in measuring performance. Inaccurate assessments of the enterprise's financial condition and performance can result from failing to incorporate fair value information. Also, investors must remember that where estimated items (such as depreciation and amortization) are significant, income ratios lose some of their credibility.

Finally, analysts should recognize that a substantial amount of important information is not included in a company's financial statements. Events involving such things as industry changes, management changes, competitors' actions, technological developments, government actions, and union activities are often critical to a company's successful operation. These events occur continuously, and information about them must come from careful analysis of financial reports in the media and other sources (Kieso, et al 2012).

2.2 Empirical Study

2.2.1 Banking in Ethiopia

Private commercial banks (PCBs) are a recent phenomenon in the Ethiopian economy. They came in to existence after the downfall of the Dergue regime. Before the Dergue, in the imperial regime, PCBs used to operate in the economy. But after the Dergue came in to power, PCBs were nationalized and amalgamated with the state owned banks, then after that Ethiopian economy was dominated by state owned banks. In this time, the Dergue regime was not allowed, not only banks but also other private sector - it was a socialist economy (Terefe, 2013).

After the downfall of the Dergue, PCBs were allowed to operate and they started to have market share. Now they have some growing market in the economy and are part of the major players in the Ethiopian economy. Their number is also growing from time to time and currently new CBs are also joining the market (Terefe, 2013).

Oromia international bank (OIB) is one of the most recent yet popular PCBs operating in the Ethiopian economy. OIB started its operation on October 25, 2008 with a capital of 110 million Ethiopian birr, surpassing the minimum capital requirement by 35 million birr at that time, now the minimum capital requirement is increased to 500 million Ethiopian birr. OIB is established with the commercial banking business objectives by aiming to undertake a universal commercial banking service such as deposit mobilization, lending of money, remittance service, and international banking services. The bank has currently 65 branches and plans 40 additional in the next year (Company Profile).

2.2.2 Previous research on bank performance

The measurement of bank performance particularly CBs is well researched and has received increased attention over the past years (Seiford, L. and Zhu, J. 1999). There have been a large number of empirical studies on commercial bank performance around the world. However, little has been done on bank performance in Ethiopia.

There are two broad approaches used to measure bank performance, the accounting approach, which makes use of financial ratios and econometric techniques which incorporates non financial measurements. Berger, A. and Humphrey, D. (1997) assert that the whole idea of measuring bank performance is to separate banks that are performing well from those which are doing poorly by using selected financial ratios. They further indicated that, “evaluating the performance of financial institution can inform government policy by assessing the effects of deregulation, mergers and market structure on efficiency” (p175). Bank regulators screen banks by evaluating banks’ liquidity, solvency and overall performance to enable them to intervene when there is need and to gauge the potential for problems (Casu et al, 2006). On a micro level, by identifying best and worst practices associated with high and low measured efficiency bank performance measurement can also help improve managerial performance.

Munir et al (2008) attempt to compare and rank the financial performance of public sector banks in Pakistan according to the selected financial indicators. The variables in study are total assets, advance, deposit, investment, profit before tax, and return on assets. Lastly, they conclude that the ranking of public sector banks differ as the financial measures or ratios differ.

According to the study done by Hempel et al. (2011) rating of commercial banks based on financial performance information taken from major rating agencies did not prevent investors who invested in bank capital from losses during bank failure. In addition to that the study concludes that at the time of failure the deposit insurance schemes do not cover the full risk of losing deposit.

Nimalathasan, B. (2008) assess and compare the financial performance of banking sector in Bangladesh by using CAMELS frame work, which involves analysis and evaluation of the six crucial dimensions of banking operations. CAMELS frame work incorporates five measurement areas namely capital Adequacy, asset quality, management capability, earnings analysis, and liquidity analysis. Finally they conclude that CAMELS frame work as a means of performance measures and rating of banks give a comprehensive view in related with financial performance of commercial banks.

Also Tabassum, N. (2010) asses and analyzes the performance of commercial banks in India using CAMEL Model. It is highlighted that the position of the banks under study is sound and satisfactory so far as their capital adequacy, asset quality, management capability and liquidity is concerned.

On the other hand Khalid, A. and Yusuf, M. (2013) had done study in Libya by establishing an objective to evaluate performance of banks in Libya using return on investment framework as a financial tool. In this study, the results clearly indicated that return on investment framework is capable of showing the overall performance of banks.

Mabwe.K and Robert.W (2010) investigates the performance of South Africa's commercial banking sector by employing financial ratios to measure the profitability, liquidity and credit quality performance of five large South African based commercial banks. The study uses ROA, ROE, and cost to income ratio in order to evaluate the profitability performance and LADST, NLTA, and NLDST in order to evaluate liquidity performance of banks in South Africa. Besides, it uses loan loss reserve to gross loan as a variable to measure the asset quality performance of CBs in South Africa. Finally the study found that the previous variables are good measurement in order to assess and conclude profitability performance, liquidity performance and asset quality performance CBs in general.

Dejene.M and Asres.A (2008) evaluated the financial performance of Construction and Business Bank (CBB) of Ethiopia by taking eight years audited annual reports. The study employs asset utilization ratios, deposit mobilization, loan performance, liquidity ratio, leverage ratio, profitability ratios, solvency ratios and coverage ratio as a measurement indicator of performance. The study recommends that timely observation of financial performance measure by responsible financial experts and remedial actions to the outcomes are two important components for improvement in financial performance of CBs.

As per the researchers' knowledge, there is no study done in OIB related with assessment of financial performance assessment. Therefore by taking the above theories in to consideration the researcher try to assess the financial performance of OIB by taking appropriate ratio measurements from the previous study. The researcher assess the financial performance OIB in terms of four performance measurements ,that the researcher believe, profitability performance, liquidity performance, asset quality performance, and operating efficiency performance.

CHAPTER THREE

DATA PRESENTATION AND ANALYSIS

Under this section the researchers presented and analyzed the data which have been gathered from the company's secondary and primary data sources. Hence the data presented here have been presented in the form of tables (as per annexed) and figures, they are expressed in percentages. The data which have been presented and analyzed on the figures have also been interpreted in words for answering the research questions.

The researcher applies selected financial ratios from a framework of different researchers of various studies related with financial performance evaluation of commercial banks. As applied in this study, financial ratios as a measure of financial performance were grouped into four performance measurements as profitability performance, liquidity performance, credit /asset/ quality performance, and operating efficiency performance.

The banking industry is subject to these ratios, and expected outputs were presented below with respect to management opinion regarding the outcomes of the study.

3.1 Profitability performance

The profitability performance of OIB is assessed based on Return on Equity framework. The researchers believed that ROE framework as a tool for measurement of bank performance is appropriate and better to assess the profitability performance of OIB.

3.1.1 Return on Equity

Taking the data from the financial statement ROE of OIB will be presented and interpreted as follows:

Table 3.1: Return on Equity Ratio of OIB

Description	Year			
	2009''2010	2010''2011	2011''2012	2012''2013
Net Income After Tax	19,224,873.00	44,462,821.00	49,516,308.00	77,494,498.00
Average Equity Capital	159,646,196.50	254,013,608.00	366,849,810.50	492,642,966.50
ROE Ratio	0.12042	0.17504	0.13498	0.15730
Growth rate		0.45357	(0.22888)	0.16541

Source: Annual Reports of OIB (2008''2009 - 2012''2013)

The data in the table 3.1 shows that the ratio of ROE increased by 45.36% from 12.04% in 2010 to 17.50% in 2011 due to strong net income growth by 131.28% from previous year as the total net income grew from 19,224,873.00 in 2010 to 44,462,821.00 in 2011. While the ratio become slightly deteriorated and decrease by 22.89% from 17.50% in 2011 to 13.50% in 2012 before finally rising by 16.54% from 13.50% in 2012 to 15.73% in 2013. The full picture of ROE can be shown in graphical method as follows..

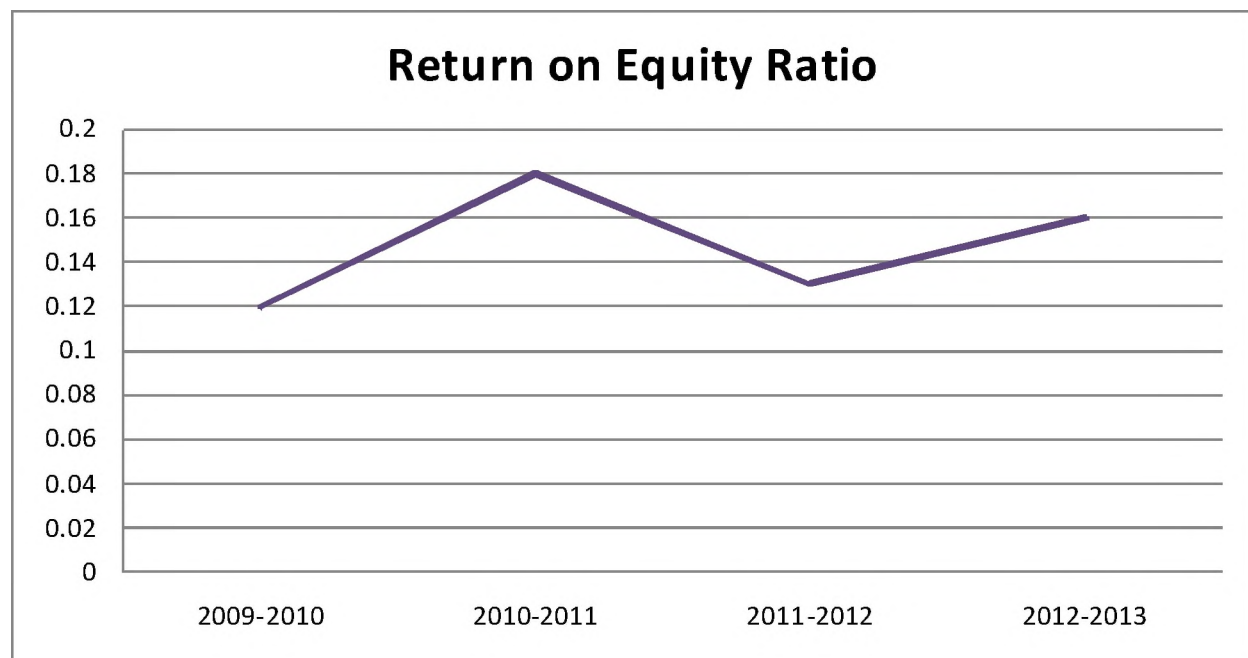


Figure 3.1 Returns on Equity Trend

It can be easily interpreted as for each 100 Birr of equity Capital contributed by the bank the amount of net income after tax earned was Br. 12.04 in 2010, Br. 17.50 in 2011, Br. 13.50 in 2012, and Br. 15.73 in 2013.

Higher ROE is recorded on the year 2011 which was 17.50 due to lower provision in loan and losses and it was at minimum on the year 2010 which is 12.04 indicating the bank was recovering its establishment costs. Generally speaking, the trend in ROE was favorable and shows improvement from time to time within the study period.

In addition to that, both net income and average equity capital are increasing from year to year. Even if both are increasing the growth rate of equity capital is higher than that of Net Income and as a result the ROE of the bank as indicated on the graph was not stable. An increase in ROE may simply result from an increase in a bank's leverage - an increase in its debt-to-equity ratio. To identify potential problems, the researchers decomposed ROE into two component parts, namely return on Asset and equity multiplier.

3.1.2 Return on Asset

The profitability performance of OIB in terms of ROA, which shows the conversion of banks assets into profit, is presented as follows.

Table 3.2: Return on Asset Ratio of OIB

DESCRIPTION	Year			
	2009''2010	2010''2011	2011''2012	2012''2013
Net Income After Tax	19,224,873.00	44,462,821.00	49,516,308.00	77,494,498.00
Average Total Asset	722,465,358.50	1,540,205,703.50	2,374,616,412.00	3,349,312,776.00
ROA Ratio	0.02661	0.02887	0.02085	0.02314
Growth rate		0.08486	(0.27767)	0.10958

Source: Annual Reports of OIB (2008''2009 - 2012''2013)

As indicated in Table 3.2 ROA increased by 8.49% from 2.66% in 2010 to 2.89% in 2011. The researchers believes that the bank's profitability remains favorable during 2011 due to strong asset growth as the total asset grew from 722,465,359 in 2010 to 1,540,205,704.00 in 2011 registering an increase of loan & advance were the main contributors to the increase in asset.

While the ratio become deteriorated slightly and decrease by 27.77% from 2.89% in 2011 to 2.09% in 2012 before finally rising by 10.96% from 2.09% in 2012 to 2.31% in 2013. The growth rate of average total assets shows a decreasing trend by 52.14% from 113.19% in 2011 to 54.18% in 2012 and by 24.23% from 54.18% in 2012 to 41.05% in 2013 indicating assets size

become increased by decreasing rate compared with previous periods. The ROA of OIB can easily be presented in the form of graph as follows:

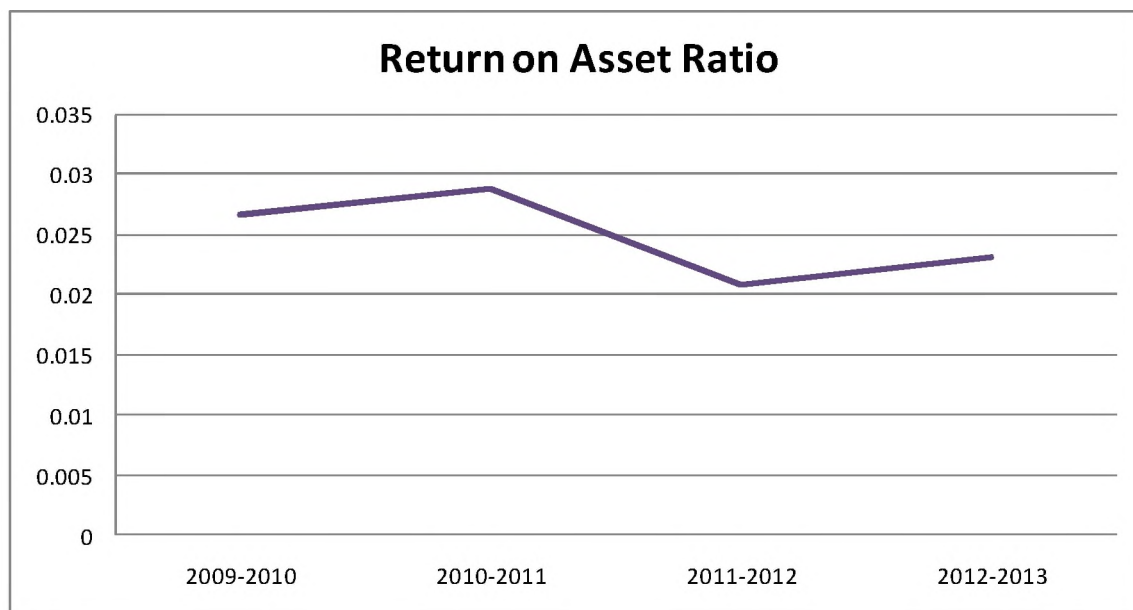


Figure 3.2 Return on Asset Trend

As it is clearly presented on table 3.2 and Figure 3.2, it can be interpreted as for each 100 Birr of average total assets invested by the bank the value that is converted to net income after tax was Br. 2.66 in 2010, 2.88 in 2011, 2.02 in 2012, and 2.31 in 2013. The ROA of OIB remains favorable during 2011 due to strong asset growth as the total asset grew from 722,465,359.00 in 2010 to 1,540,205,704.00 in 2011. Registering an increase of loan & advance were the main contributors to the increase in asset. Whereas the ratio become deteriorated during 2011 before slightly improved, due to decrease in assets size compared with previous periods.

3.1.3 Equity Multiplier

The EM, which measures the Birr value of assets funded with each dollar of equity capital, as per the balance sheet of OIB is presented as follows:

EM ratio as per annexed can be evidence for increasing of EM ratio by 33.98% from 4.53 in 2010 to 6.063 in 2011, 6.75% from 6.06 in 2011 to 6.47 in 2012, and 5.03% from 6.47 in 2012 to 6.80 in 2013 indicating equity capital as a source of fund become declining from period to period. The trend in equity multiplier can be presented graphically as follows:

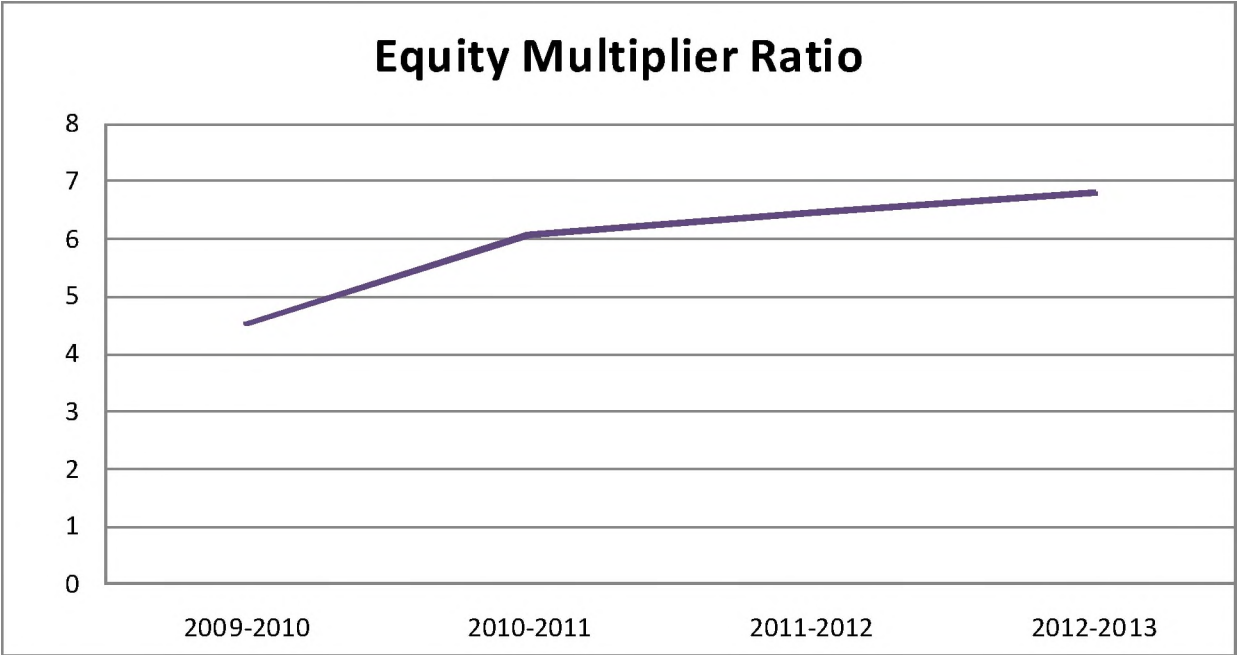


Figure 3.3 Equity Multiplier Trend

The data in the graph interpreted as for each 1 Birr of equity Capital invested in the bank the value of asset funded was Br. 4.525 in 2010, 6.063 in 2011, 6.472 in 2012, and 6.7099 in 2013. The figure shows that the bank becomes more leverage from period to period which is indicated by rising of equity multiplier ratio and as a result its solvency risk has increased.

3.1.4 Asset Utilization

For suitability of the study the researchers breakdown AU, which is the banks management ability to generate income from its assets, as interest income and non-interest income generated per dollar of total assets.

As we can see from the annex, AU of the bank has been deteriorating from year to year. The ratio decreasing by 10.50% from 11.11% in 2010 to 9.94% in 2011, by 2.87% from 9.94% in 2011 to 9.66% in 2012 before slight improvement by 3.09% in 2013. The result of asset utilization ratio can be presented graphically as follows:

Asset Utilization Ratio



Figure 3.4 Asset Utilization Trend

As it is clearly presented in Figure 3.4, for each Br. 100.00 investment on total assets amount of operating income generated is Br. 11.11 in 2010, Br. 9.94 in 2011 and Birr 9.66 in 2012 before slightly improved to Birr 9.96 in 2013.

Here further break down of operating income in to Interest Income and non-interest income is essential for knowing of the source of declining in the ratio. From the breakdown we can observe that the amount of non interest income generated per Birr of total asset becomes declining unexpectedly by 14.35% from 6.90% in 2010 to 5.91% in 2011, by 23.86% from 5.91% in 2011 to 45.02% in 2012 and finally by 8.73% from 45.02% in 2012 to 41.09% in 2013. Whereas, the trend in interest income generated per Birr of total asset shows efficient and appreciable improvement in enhancing the bank's ability to generate income from its assets.

As per the AU ratio (attached annex), high value in the Interest income ratio signify the efficient use of bank resources to generate income and low value (declining values) in the non-interest income ratio show the in efficient use of bank resources by the management.

3.1.5 Net Profit Margin

The Net Profit Margin trend in terms of Net income After Tax to Total Operating Income ratio as indicated in the attached annex shows that increasing by 21.21% from 23.95% in 2010 to 29.03% in 2011. The reason in turn up of Net Profit Margin ratio was an efficient reduction of non-interest expenses to total operating income ratio by 20.87% from 50.38% in 2010 to 39.87% in 2011 and reduction of provision for loan and advances to total operating income ratio by 52.02% from 38.44% 3.84% in 2010 to 1.84% in 2011. Here efficiency in controlling expense increases the value of the NPM ratio.

On the contrary, it has been decreasing by 25.63% from 29.03% in 2011 to 21.59% in 2012 before slightly improved by 7.63% in 2013. The reason in declining of NPM ratio was an increase in provision for loan and advances to total operating income ratio, which was under estimated in the previous period 2011, by 44.99% from 1.84% in 2011 to 2.67 in 2012. Similarly non-interest expense ratio was increased by 12.26% from 39.87% in 2011 to 44.76% in 2012. Here a high value of both expense ratios produces a decrease in the bank's profit; it may be an indication of a problem situation in the bank.

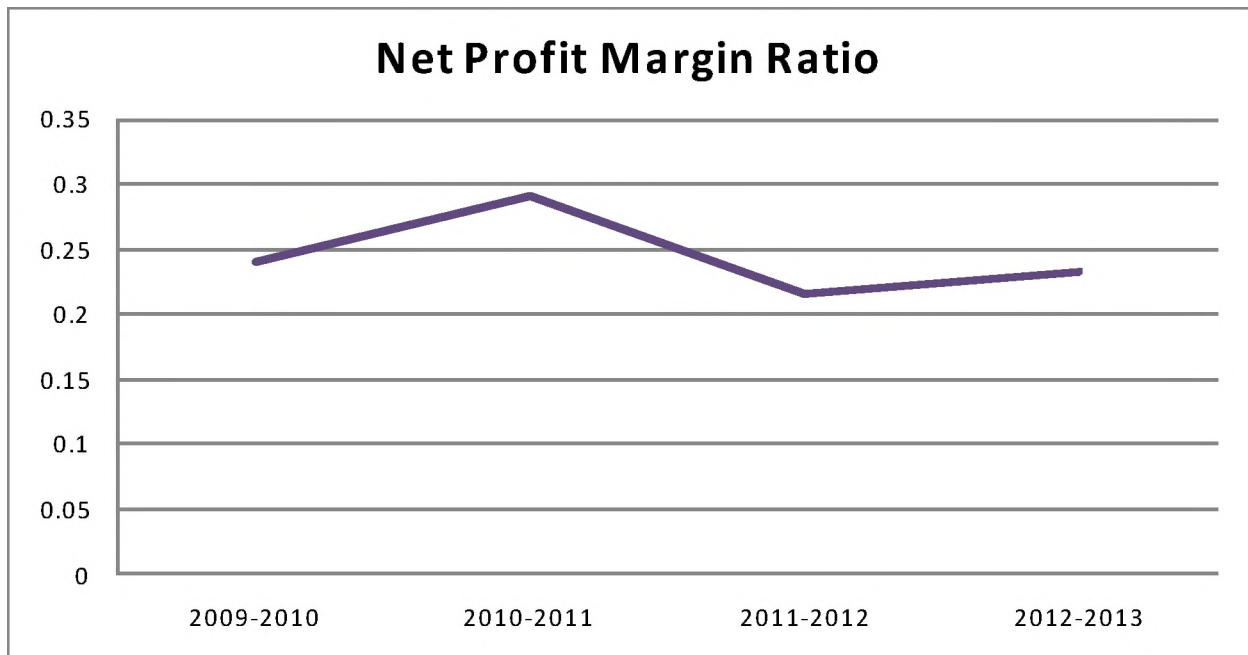


Figure 3.5 Net Profit Margin Trend

The ratios in Figure 3.5 implies that, amount of net income after tax from 100 Birr of operating income was Br. 23.95 in 2010, Br. 29.03 in 2011 and Br. 21.59 in 2012 before slightly improved to Br. 23.24 in 2013.

The opinion of the management regarding the outcomes of profitability performance ratios shows that the reason for increasing trend in 2011 is due to the reality of being after establishment whereas, the reason for declining in profitability in 2012 is due to taking the higher return in the study period, 2011, as a base year for comparison purpose.

3.2 Liquidity performance

Norms for liquidity ratios of business firms are possible because their liabilities are predictable due to their fixed maturities. For banks, there are no universally recognized liquidity ratios as a large percentage of their liabilities (e.g. deposits) are due on demand. Nevertheless the following ratios can be used as partial indicators. The liquidity of OIB is measured based on liquid asset to average total asset ratio (LAATA), liquid asset to deposit and short term borrowing (LADST), loan to deposit and short term borrowing ratio (NLDST)

3.2.1 Liquid Asset to average total asset ratio

Liquid asset to total asset ratio is a direct method of assessing the liquidity of bank in terms of the overall total asset.

The ratio as per the attached annex has been generally falling for the period under study indicating declining in liquidity of the bank. The ratio decreases by 36.59% from 87.02% in 2010 to 55.18% in 2011, by 15.49% from 55.18% in 2011 to 46.63% in 2012 & by 23.07% from 46.63% in 2012 to 35.87% in 2013. The reason in declining of liquidity ratio was parallel with the decline in growth rate of liquid asset compared with previous periods by 13.9% from 35.18% in 2011 to 30.29% in 2012 and by 71.93% from 30.29% in 2012 to 8.5% in 2013 as a result of more funds become invested in other company share and long term assets .

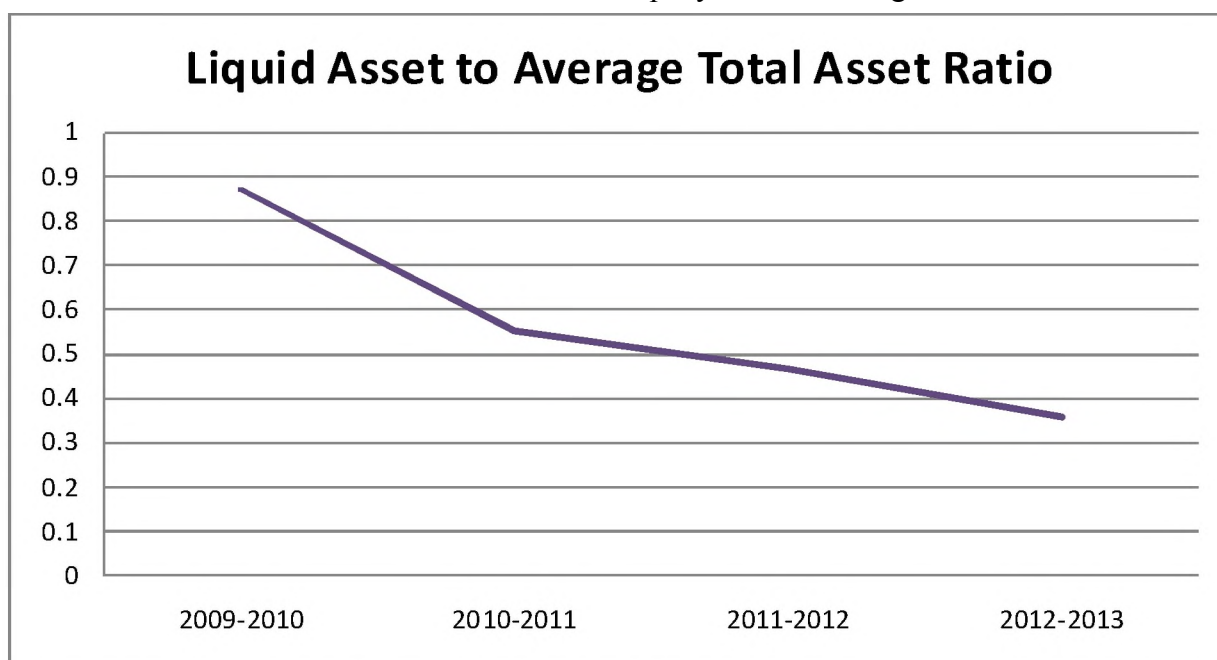


Figure 3.6 Liquid Assets to Average Total Asset Trend

It can be easily interpreted as for each 100 Birr of total asset the proportion of liquid asset was, Br. 87 In 2010, Br. 55.17 In 2011 Br. 46.62 In 2012 and Br. 35.87 in 2013 indicating reduction in proportion of liquid assets from the overall total assets which leads to declining in liquidity position of OIB within the study period.

3.2.2 Liquid asset to deposit and short-term borrowing

LADST is additional direct method of assessing the liquidity of a bank which indicates the percentage of short term obligations that could be met with the bank's liquid assets in the case of sudden withdrawals.

As we can see from the annexed table the LADST ratio has been gradually falling for the period under review indicating reduced liquidity for the bank which is similar with LAATA ratio. The ratio decreases by 27.29% from 76.57% in 2010 to 55.67% in 2011, by 6.08% from 55.67% in 2011 to 52.29% in 2012 & by 24.69% from 52.29% in 2012 to 39.38% in 2013 which indicates a fall in the amount of customer & short term funds that could be met if they were suddenly withdrawn. The full picture LADST ratio can be shown graphically as follows:

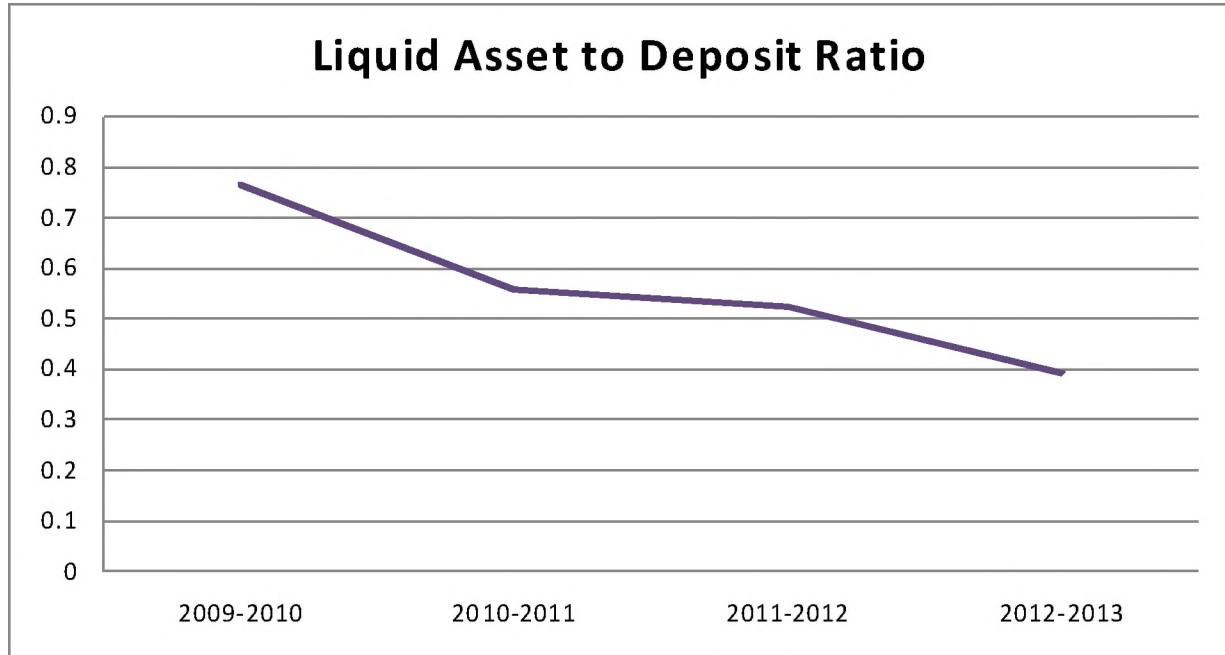


Figure 3.7 Liquid Asset to Deposit and Short term borrowings Trend

In addition to that we can compare the growth rate of both deposit & liquid asset within the study period. Growth rate of liquid asset has been deteriorating from time to time (increasing by decreasing rate) by 13.9% from 35.18% in 2011 to 30.29% in 2012 & by 71.93% from 30.29% in 2012 to 8.5% in 2013. On the other hand, deposit held in 2011 is increased by 85.93% from previous year deposit (2010) by birr 705,384,203.00. Even if it seems falling in the year 2012 by 54.94% again it starts increasing in the subsequent year (2013) by 13.83% from 38.72% in 2012 to 44.07% in 2013.

3.2.3 Net Loan to Deposit and Short Term Borrowing Ratio

The outcomes of NLDST of OIB which indicates the percentage of the total deposits locked into non-liquid assets are presented as follows:

The liquidity trend in terms of NLDST as indicated in the annexed table shows that decreasing by 3.46% from 44.43% in 2010 to 42.89% in 2011 and subsequently increasing by 10.81% from 42.89% in 2011 to 47.53% in 2012 and by 10.17% from 47.53% in 2012 to 52.37% in 2013. The increasing trend indicate deteriorating liquidity in the bank as more and more assets, customer deposit and short term funding are tied in to loans which are classified as illiquid assets .

The variation in the ratio from 2010 to 2013 is attributed to changes in both loans to customers and changes in deposit and short term funding. Here the growth rate in loans to customers shows that it becomes declining from period to period by 32.41% from 79.48% in 2011 to 53.72% in 2012 before slightly increase in the subsequent period by 9.33% from 53.72% in 2012 to 58.73% in 2013. The results of ratio can be presented in a graph as follows:

Similarly the growth rate of deposit in deposit and short term funding shows a diminishing trend by 54.94% from 85.92% in 2011 to 38.72% in 2012 and slightly increase by 13.83% from 38.72% in 2012 to 44.07% in 2013.

As the ratio implies, the proportion of illiquid asset locked in to loan and advances from each 100 Birr of deposits and short term borrowing in the bank was, Br. 44.43 In 2010, Br. 42.89 In 2011 Br. 47.53 In 2012 and Br. 52.37 in 2013 indicating growth in proportion of illiquid assets which leads to declining in liquidity position of OIB within the study period. The minimum ratio 42.89% was recorded in the year 2011, which shows better liquidity in the study period & it

reaches to the maximum 52.37% in the year 2013, which indicates deterioration of liquidity in the bank as a result of the portion of deposit tied up by loans or illiquid assets becomes high and liquid assets to the reverse.

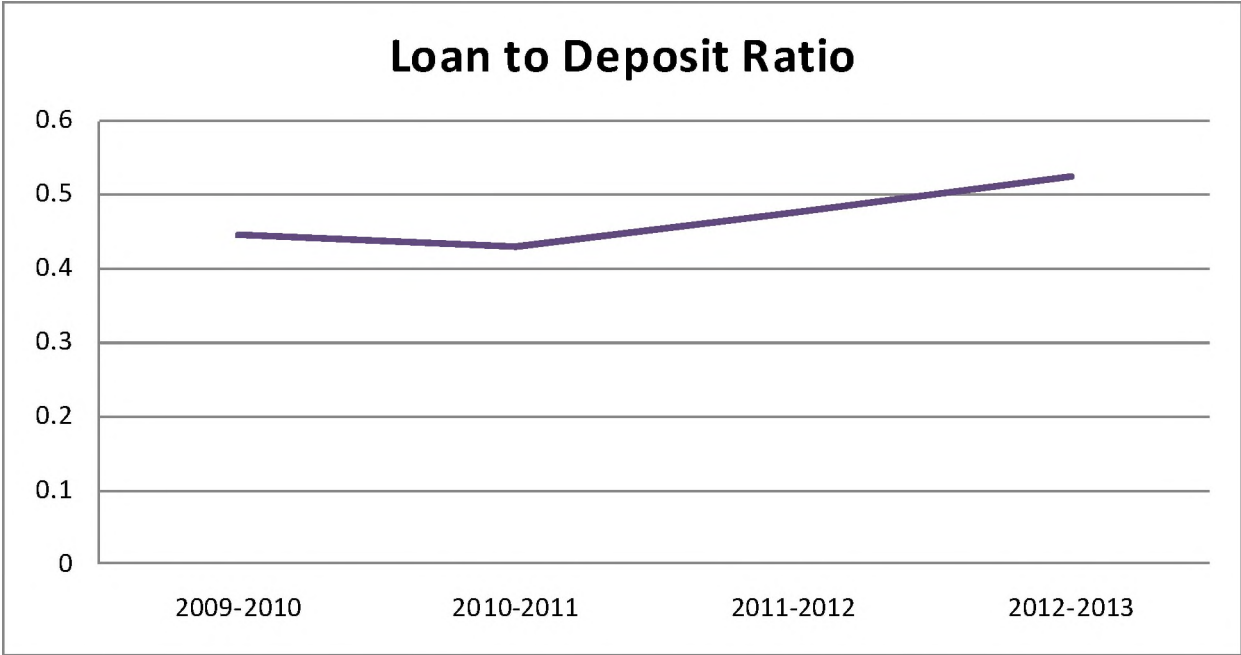


Figure 3.8 NET Loan to Deposit AND Short term borrowings Trend

Based on the data collected from unstructured interview, the opinion of the management of OIB related with computed liquidity ratios indicate that the decline in liquid asset proportion from total assets of the bank is made intentionally for enhancement of returns on excessive assets held with smaller return rate and in parallel, the bank also considers maintaining the required liquidity.

3.3 Credit/Asset/ quality performance

Credit performance evaluates the risks associated with the bank's asset portfolio i.e. the quality of loans issued by the bank. Several ratios can be used for measuring credit quality however, not all information on the loans is always available the researchers use percentage of loan loss provision and net nonperforming assets to net loan and advance.

3.3.1 Percentage of Loan Loss Provision

This ratio indicates the proportion of the total portfolio that has been set aside but not charged off. It is a reserve for losses expressed as a percentage of total loans. Provision for loan losses item represents the bank management's prediction of loans at risk of default for the period.

The ratio shows a fairly stable trend in the loan reserve to gross loans ratio between 2010 and 2011. However, 2012 to 2013 shows significance deterioration in the Credit Quality. The ratio declines 6.9% from 1.143% to 1.06% during the period 2010-2011. The slight improvement was due to continued growth in loans to customer as well as growth in non performing loans which continued on a downward basis.

The loan portfolio deteriorated in 2012-2013 as the ratio increased by 21.41% from 1.06% in 2011 to 1.29% in 2012 & by 13.10% from 1.29% in 2012 to 1.46% in 2013. Credit risk ratio increased during 2013 indicating the deterioration of the quality of the loan portfolio as compared to 2012. The full picture of percentage of loan loss provision ratio is graphically presented as follows:

The data presented in the Figure 3.9 can be easily interpreted as for each 100 Birr of gross loan and advances given by the bank the amount of provision for loan and advances, which shows the bank managements prediction of loans at risk of default for the period was Br. 1.14 in 2010, Br. 1.06 in 2011, Br. 1.29 in 2012 and Br. 1.46 in 2013 indicating deterioration of the quality of the loan portfolio within the study period.

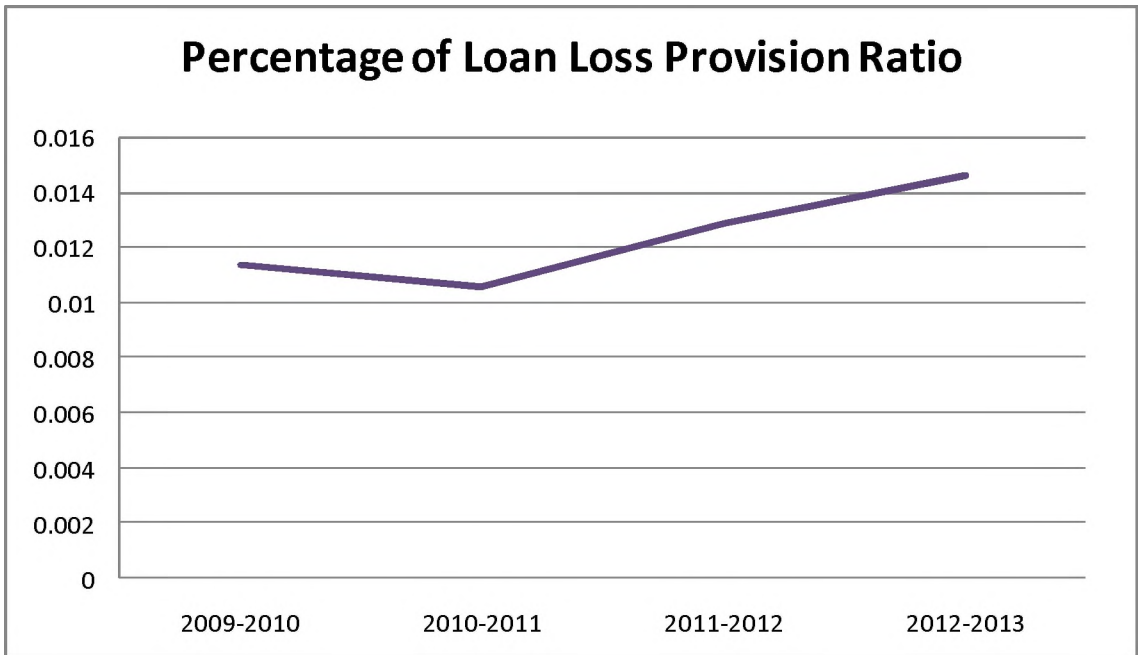


Figure 3.9 Percentage of Loan Loss Provision Trend

Even if percentage of loan loss provision ratio is fairly stable between 2010 and 2011 gradually it becomes significantly deteriorated up to the end of the study period. An increase in the ratios shows an increase in credit risk subject to deterioration of the quality of the loan portfolio in the study period.

3.3.2 Net Non-performing Assets to Net Loan & Advance

Similar with the percentage of loan loss provision ratio, table 3.10 shows a fairly stable trend in the non performing loans to net loan and advances ratio between 2010 and 2011. However, 2012 to 2013 shows significance deterioration in the Credit Quality.

As we observe from attached annex, for the period 2011 to 2013 nonperforming loans & advances increased from 6,026,959.00 in 2011 to 54,495,061.00 in 2013. As a result the bank were more exposed to increased credit risk as risky loans given during the 2010-2011 period began to go bad and the banks reported higher charge off or additional provision for loan losses.

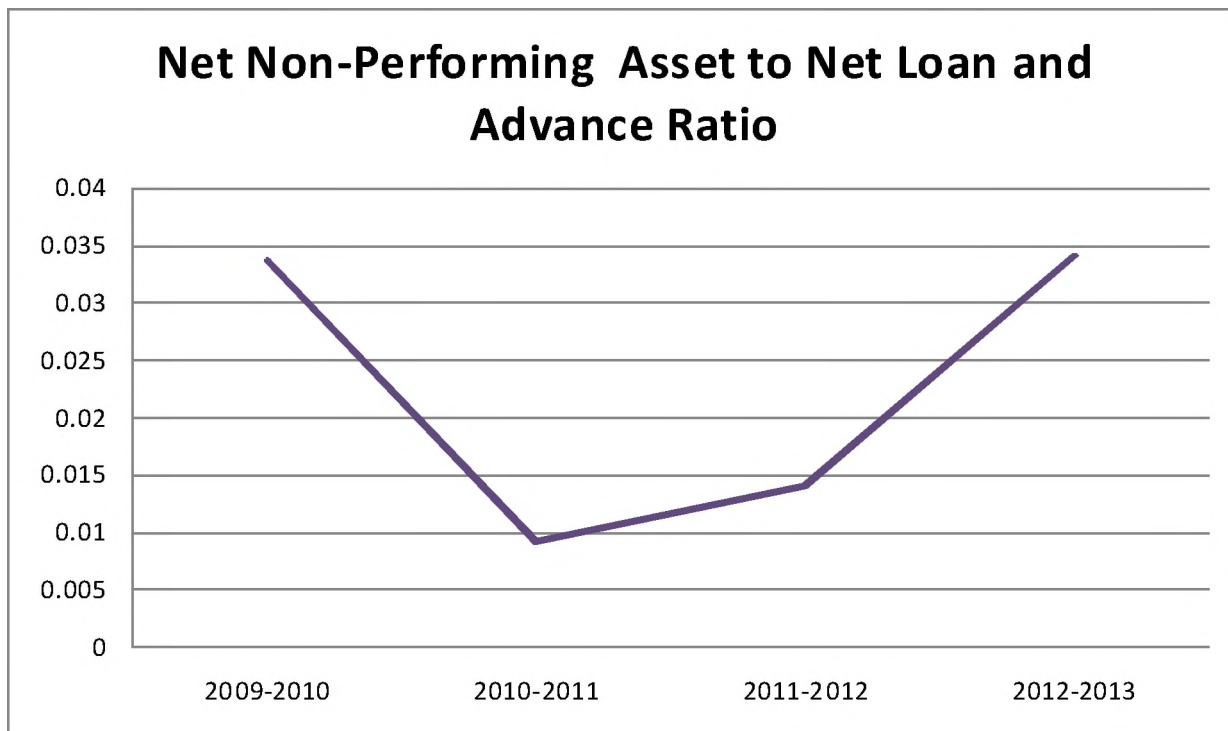


Figure 3.10 Net nonperforming assets to Net loan and advance ratio Trend

Similar with the previous ratio, the data presented in the figure 3.10 can be interpreted as for each 100 Birr of net loan and advances given by the bank the amount of non-performing loans and advances was, Br. 3.37 In 2010, Br. 0.92 In 2011 Br. 1.40 In 2012 and Br. 3.41 in 2013 indicating the bank were exposed to increased credit risk subject to risky loans given during the previous period.

Management's opinion related with exposure of the bank to increased credit risk within the study period starts from acceptance of the findings. Even if they accept the outcomes, as per the management opinion, compared with the industry OIB is in a better position in terms of credit quality and it is given a great attention and closely supervised by the management.

3.4 Operating Efficiency Performance

The operating Efficiency of OIB is evaluated and presented with reference to expense to total income, overhead efficiency ratio, and net interest margin ratio as follows.

3.4.1 Expense to Total income

The expense to income ratio, which measure the cost incurred per birr of income, of OIB is presented as follows.

As per the attached annex the ratio of expense to income which was 76.05% in 2010 has gone down to 70.97% in 2011 and decrease by 6.68% from 76.05% in 2010 to 70.97% in 2011 indicating improvement in management capability of reducing cost per Birr 100.

The trend reflected by ROA & ROE is also reflected in the cost to income ratio indicating better efficiency and profitability Performance in 2011. The improvements in cost to income are mainly ascribed to increasing net income reported by the bank which rose by 131.27% from Br. 19,224,874 in 2010 to 44,462,821 in 2011 consequent of the lower loan loss provision and relatively operating expenses. Whereas the reverse is happen in the subsequent periods. Cost to income ratio increase by 10.48% and reaches 78.41% in 2012 before fall to 76.76% in 2013. The result of cost to income ratio is presented in a graph as follows.

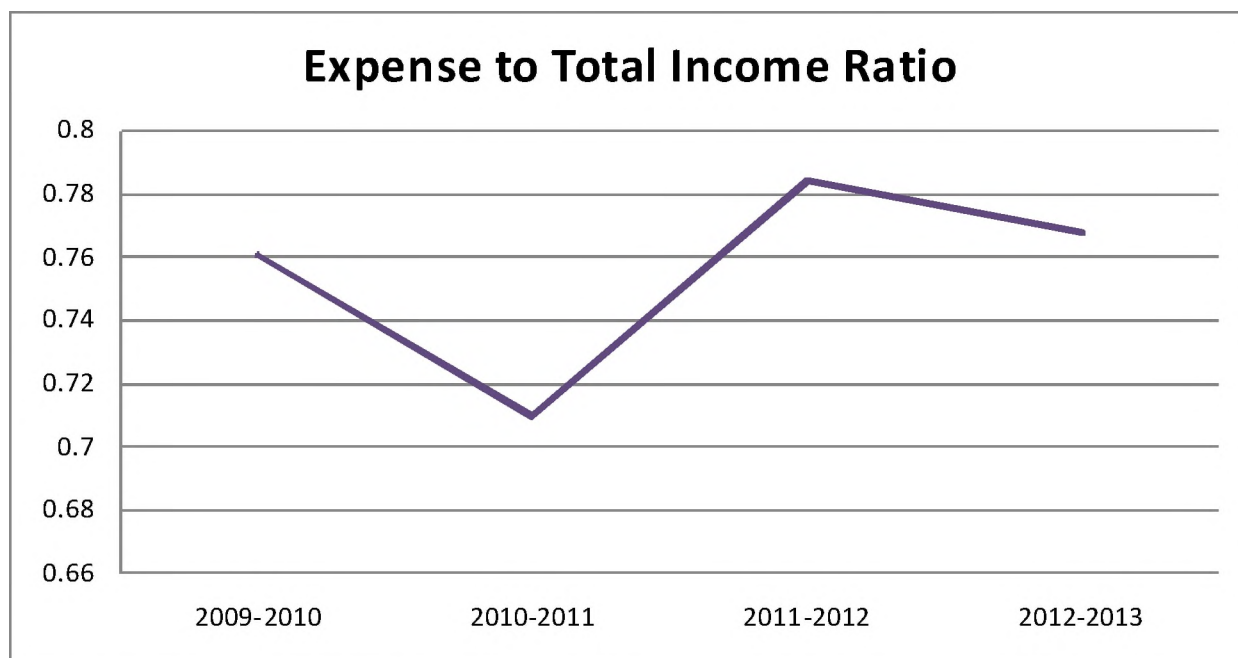


Figure 3.11 Expenses to Total Income Trend

The cost per Birr of income can be implied from the data on Figure 3.11 was only 0.76 Birr in 2010 and 0.71 in 2011. Whereas in the remaining periods of the study was Birr 0.78 in 2012 and Birr 0.77 in 2013, which shows diminishing of management capability compared with previous periods. Diminishing in management capability is because of higher amount of loan loss provision and relatively increasing in operating expenses in the year 2012 and 2013.

3.4.2 Overhead efficiency ratio

The overhead efficiency, which measures the bank's ability to generate non-interest income to cover non-interest expenses, of OIB is presented and interpreted as follows.

As we see from the annexed table the over head efficiency of OIB increased by 20.91% from 123.34% in 2010 to 149.13% in 2011 while, it was aggressively declining in the remaining study period. The ratio decreased by 30.17% from 149.13% in 2011 to 104.14% in 2012 and by 15.87% from 104.14% in 2012 to 87.62% in 2013. The decrease in overhead efficiency ratio is due to two reasons.

The first one is due to decrease in growth rate of interest income. Interest income growth rate is decrease by 78.94% from 82.58% in 2011 to 17.39% in 2012 and slightly improved by 65.23% from 17.39% 2012 to 28.74% in 2013.

The second reason is an increment of a non-interest expense unexpectedly. Here, non-interest expense is increased by 33.55% from 50.99% in 2011 to 68.10% in 2012 and slightly decrease by 22.14% from 68.10% in 2012 to 53.03% in 2013.

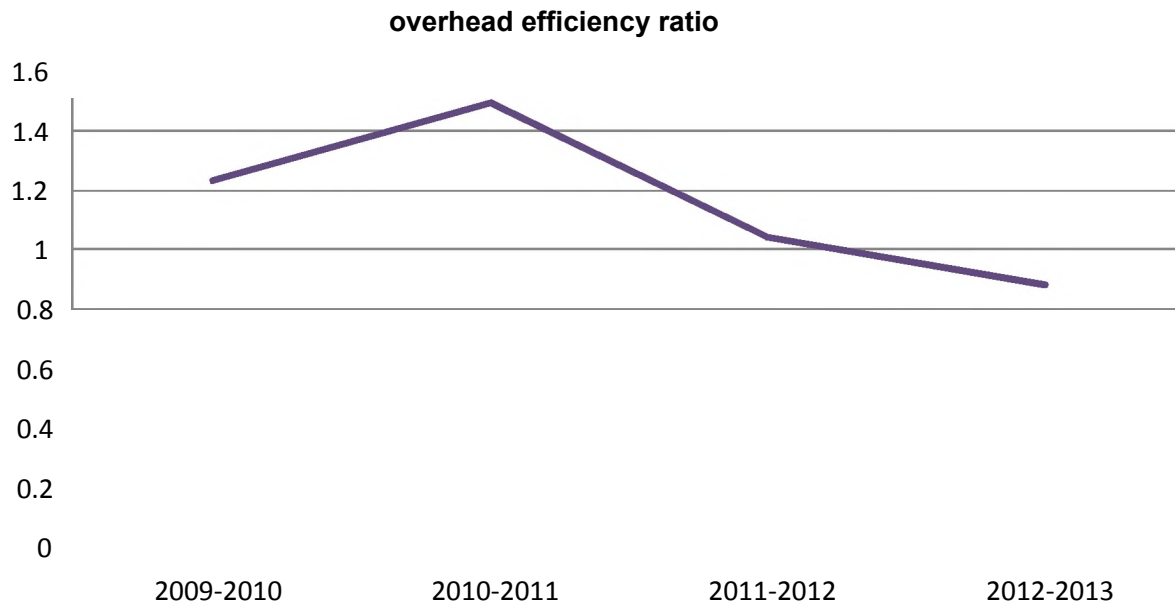


Figure 3.12 Overhead Efficiency ratio Trend

The data presented in the figure 3.12 can be easily interpreted as for each 100 Birr of non-interest expenses incurred the bank's ability to generate non-interest income was Br. 123.34 in 2010, Br. 149.13 in 2011, Br. 104.14 in 2012 and Br. 87.61 in 2013 indicating diminishing of management capability in coverage of non-interest expenses by non-interest income compared with previous periods.

3.4.3 Net Interest Margin

NIM ratio which shows the net return per banks earning assets is presented as follows.

The ratio in the annexed table decreased by 20.83% from 3.81% in 2010 to 3.01% in 2012 indicating a higher growth rate on earning asset compared with Net interest income by 145.93% from 397,584,987 to 977,792,523. On the other hand it is increased by 28.34 from 3.02% in 2011 to 3.87% in 2012 and by 27.11% from 3.87% in 2012 to 4.92 in 2013. It is because of a higher growth of Net interest income compared with earning assets by 127.16% from 29,510,072.00 in 2011 to 67,036,089.00 in 2012 and by 0.9708 from 67,036,089.00 in 2012 to 132,117,656.00 in 2013.

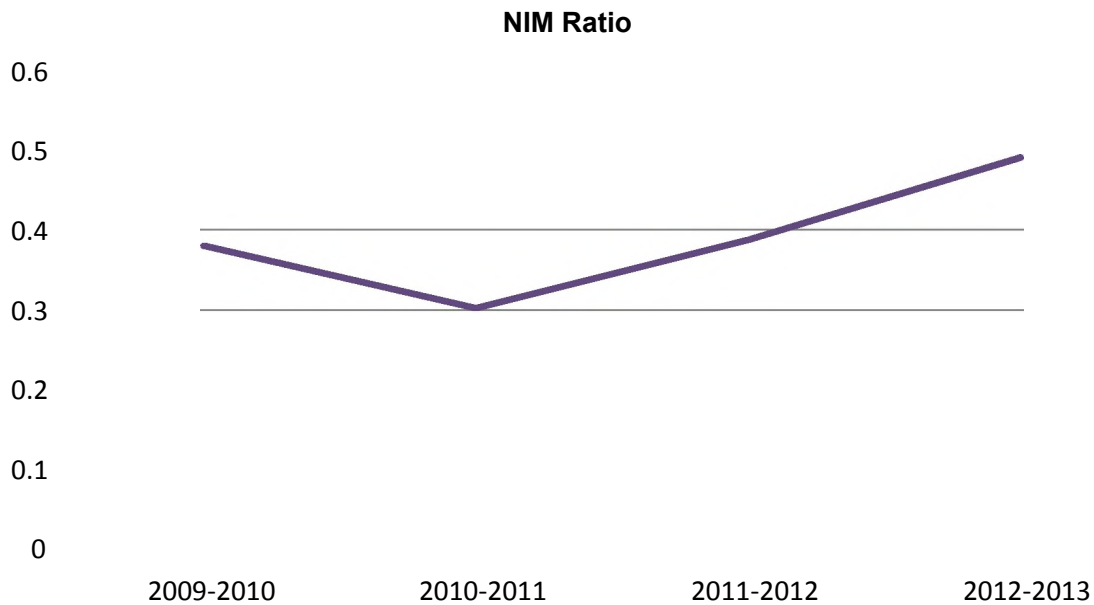


Figure 3.13: Net Interest Margin Trend

The result of net interest margin ratio infer that for each 100 Birr of banks earning asset, investment securities and loans and advances approved, the bank's net return was Br. 38.12 in 2010, Br. 30.18 in 2011, Br. 38.73 in 2012 and Br. 49.23 in 2013 showing efficient management in utilization of banks earning asset within the study period.

Similar with previous management opinion, here also the opinion starts with accepting the findings of the study. Specifically in this performance measurement, the management argues with the researcher's conclusion in declining of expense to total income ratio, overhead efficiency ratio, and NPM with in the study period. In order to improve these inefficiency, in the subsequent period after the study the bank starts a new non-interest service which is called a non interest banking helps the bank to increase commission income and similarly to improve the overhead efficiency of the bank.

CHAPTER FOUR

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

This chapter presents the findings, conclusion and recommendations of the results. It has three parts: the first part presents summary of major findings of the study, the second part presents the conclusion and the last part presents the recommendation part of the study.

4.1. Summary of Major Findings

Based on the frame work designed to asses and answer previous four basic questions the researchers found the following major findings from analysis and interpretation of data in chapter three.

- Higher ROE is recorded on the year 2011 which is 17.50% and it was at minimum on the year 2010 which is 12.04%.
- The ROA of OIB remains favorable during 2011 whereas the ratio becomes deteriorated during 2012 before slightly improved.
- The trend in EM ratio shows that the bank becomes more leverage from period to period which is indicated by rising of equity multiplier ratio and as a result its solvency risk has increased.
- The amount of non interest income generated per Birr of total asset becomes declining unexpectedly whereas, the trend in interest income generated per Birr of total asset shows efficient and appreciable improvement in enhancing the bank's ability to generate income from its assets.
- Higher NPM was recorded on the year 2011 which is 29.03% and it was at minimum on the year 2012 which is 21.59%
- Liquid asset to total asset proportion was indicating reduction in proportion of liquid assets which leads to declining in liquidity position of OIB within the study period.
- Similarly, the proportion of illiquid asset locked in to loan and advances was indicating up warding which leads to declining in liquidity position of OIB within the study period.
- The amount of provision for loan and advances, which shows the bank managements prediction of loans at risk of default, shows increasing from period to period.

- Percentage of loan loss provision ratio is in an increasing trend and in effect increases the credit risk subject to deterioration of the quality of the loan portfolio in the study period.
- Similarly non-performing loans and advances was increased from period to period within the study period which indicates the bank were exposed to increased credit risk subject to risky loans given during the previous period.
- The expense to income ratio is diminishing within the study period which indicates diminishing of management capability compared with previous periods.
- Overhead efficiency ratio was in a decreasing fashion that indicates diminishing of management efficiency in coverage of non-interest expenses by non-interest income compared with previous periods.
- The result of NIM was favorable and shows efficient management in utilization of banks earning asset.

4.2. Conclusion

Based on major findings in the previous section the researchers conclude the following points regarding financial performance of OIB with in previous four performance measurement areas.

- Higher ROE is recorded on the year 2011 which was 17.50% due to lower provision in loan and losses and the ROA also remains favorable during this period due to strong asset growth as the total asset grew from 722,465,359.00 in 2010 to 1,540,205,704.00 in 2011. The researchers believes that an increase of loan & advance were the main contributors to the increase in asset. In addition to that, higher NPM was recorded in similar year showing an efficient reduction of non-interest expenses to total operating income ratio.

On the other hand, ROE and ROA was at minimum on the year 2012 due to decrease in assets size compared with previous periods. Similarly, NPM was at minimum in the same year because of an increase in provision for loan and advances to total operating income ratio, which the researchers believe under estimated in the previous period 2011.

In related with source of finance, EM ratio of the bank shows an increasing trend within the study period and it can be conclude that the bank becomes more leverage from period to period and consequently its solvency risk has increased. In general, it can be concluded that the trend in ROE was favorable, but it is difficult to say it was consistent within the review periods.

- The result of LAATA and LADST ratios indicates reduction in proportion of liquid assets from the overall total assets which leads to declining in liquidity position of OIB within the study period. The researchers believes that the reason in declining of liquidity ratio was parallel with the decline in growth rate of liquid asset compared with previous periods and as a result of more funds becomes invested in other company share and long term assets.

NLDST ratio also supports the previous conclusion that the growth in proportion of illiquid assets within the study period was up warding, as a result of the portion of deposit tied up by loans or illiquid assets becomes high and liquid assets to the reverse.

Therefore, the researchers can conclude that the liquidity performance of OIB is gradually falling from period to period, showing a fall in the amount of customer & short term funds from total deposit and short-term borrowing within the study periods.

- The result of percentage of loan loss provision ratio shows an increasing fashion which is an indicative of credit risk subject to deterioration of the quality of the loan portfolio in the study period. Similar with the previous ratio, net non performing assets to net loan and advance ratio also implies similar trend that indicates the bank were exposed to increased credit risk subject to risky loans given during the previous period.

Here based on the result of both ratios, the researchers can conclude that the performance of OIB in related with asset quality management is weak. The researchers believes that the bank was more exposed to increased credit risk due to risky loans given during the 2010-2011 period began to go bad as supported by higher charge off or additional provision for loan losses in the banks report.

- The trend in expense to total income ratio were in an increasing fashion that shows diminishing of management capability compared with previous periods. The researchers believe that diminishing in management capability is because of higher amount of loan loss provision and relatively increasing in operating expenses in the year 2012 and 2013.

It is also indicated in the overhead efficiency ratio that the bank's ability to generate non-interest income was down warding, so again there is management inefficiency in coverage of non-interest expenses by non-interest income compared with previous periods. The researcher's believes that the down warding trend in overhead efficiency ratio is due to decrease in growth rate of interest income and an increase in growth rate of a non-interest expense unexpectedly from period to period.

Here based on output of overhead efficiency ratio and expense to total income ratio, the researchers can conclude that the overall performance of OIB in terms of controlling expense efficiency is unfavorable within the study period.

4.3. Recommendation

In this section the researchers as a professional person recommends possible solutions to the outlined findings in the previous section as follows:

- Liquidity is a bank's capacity to fund increase in assets and meet both expected and unexpected cash and collateral obligations at reasonable cost and without incurring unacceptable losses. To improve liquidity performance, OIB should have to hold high quality liquid assets and convert them in the event of liquidity shortage. Even if liquid assets offer lower returns, holding more liquid assets and better matching cash-flows of assets and liabilities will reduce the liquidity risk of the bank and protect it from insolvency. Effective liquidity risk management helps ensure a bank's ability to meet its obligations as they fall due and reduces the probability of an adverse situation developing. Therefore, the researchers recommend the management of OIB to hold liquid asset at optimum level between liquidity risk and profitability.
- Banks lend money to ordinary commercial and personal borrowers that they receive from depositors, but they have to be quality borrowers. Loans are a bank's primary asset category and they should have to be managed effectively. While declining in asset quality is always an issue of a big problem for financial institutions. In order to improve the credit quality, the researchers recommend OIB to diversify the bank's assets and capital which provides a barrier to losses related with default risk on its granted loans and to take a great care of quality in approval of loan and advances.
- As it is indicated in the finding the overhead efficiency ratio of OIB with in the study period is unfavorable. Regarding these, OIB expected to maximize services other than interest income, which is unique from the usual incomes like fees and non-interest income including deposit and transaction fees, insufficient funds (NSF) fees, annual fees; monthly account service charges, check and deposit slip fees, etc. In addition, the researchers suggest OIB should have to struggle to cut costs and have consequently to eliminate such non interest expenses. The researchers also recommend OIB managements to give great considerations in controlling of operating as well as non-interest expenses.

Bibliography

- Khalad, A. and Yusuf, M. (2013). Evaluating the Performance of Libyan Banks Using Return on Investment. *American Journal of Economics and Business Administration*, 5, 84-88.
- Asres Abite and Dejene Mamo (2012). Evaluation of Financial Performance of Banking Enterprise; In the Case of Construction and Business Bank. *Revista Tinerilor Economisti (The Young Economists Journal)*, 1, 82-102.
- Berger, A. N. and Humphrey, D. B. (1997). Efficiency of Financial Institutions: International Survey and Directions for Future Research. *European Journal of Operational Research*, 98, 175-212.
- Brigham, E. and Houston, J. (2009). *Fundamentals of Financial Management* (8th edition). London, England: Prentice Hall.
- Casu, B., Molyneux, P., and Girardone, C. (2006). *Introduction to Banking*, London, England: Prentice Hall.
- Drake, L. (2010). Efficiency and Productivity Change in UK Banking. *Applied Financial Economics Journal*, 11, 557-571.
- Frase, L. and Ormiston, A. (2004). *Understanding Financial Statements*. London England: Pearson Education Limited.
- Hempel, G., Simonson, D., and Coleman, A. (1994). *Bank Management: Text and Cases* (4th Edition). New York, USA: John Wiley & Sons, Inc.
- Joh., N. Meyer (2008). *Accounting For Non Accountants*. New York, USA: Penguin Group Incorporated.
- Kieso, E., Weygandt, J. and Warfield, D. (2012). *Intermediate Accounting* (14th edition). New York, USA: John Wiley Inc.
- Mabwe, Kumbirai and Robert, Webb (2010). Financial Ratio Analysis of Commercial Bank in South Africa. *African Review of Economics and Finance*, 2, 1.
- Nimalathasan, B. (2008). A comparative Study of Financial Performance of Banking Sector in Bangladesh; An Application of CAMELS Rating System. *Annual of University of Bucharest. Economic and Administrative Series*, 2, 141-152.
- Peter, S. Rose. (2002). *Commercial Bank Management* (5th Edition). New Delhi, India: Mc Graw Hill Limited.

- Ginevicius, R. and Askoldas, P. (2011). A Framework of Evaluation of Commercial Banks: In the case of Lithuanian commercial banks. *Intellectual Economics*, 5, 37.
- Seiford, L., and Zhu, J. (1999). Profitability and Marketability of the Top 55 U.S. Commercial Banks. *Management Science*, 45 (9), 1270-1288.
- Munir, S., Muhammad, R., Rao, Q., Muhammad, A., and Ali, R. (2008). Financial Performance Assessment of Banks. A Case of Pakistani Public Sector Banks. *International Journal of Business and Social Science*, 3, 14.
- Sinkey, J. (2002). *Commercial Bank Financial Management: In the Financial Services Industry* (6th ed). Singapore, Indonesia: Prentice Hall.
- Tabassum, N. (2010). Analyzing Financial Performance of Commercial Banks in India; Application of CAMEL Model. *Pak.J.Commer. Soc. Sci.*, 4(1). 40-55.
- Terefe, Simeneh (2013). *Prospect and Challenges of Private Commercial Banks in Ethiopia*. Addis Ababa: Unity University.
- Thukaram, R. (2006). *Accounting and Financial Management- For third semester B.C.A and M.C.A Students*. New Delhi, India: Subhas store.

APPENDICES

Appendix I

Interview Questions presented to the Banks Management Officials

1. What is management's opinion regarding the trend in profitability performance with in the study period?
2. What is management's opinion regarding the trend in liquidity performance with in the study period?
3. What is management's opinion regarding the trend in asset quality performance with in the study period?
4. What is management's opinion regarding the trend in operating expenses efficiency performance with in the study period?

Appendix II

Financial ratios related with Profitability Performance

Equity Multiplier Ratio

DESCRIPTION	Year			
	2009"2010	2010"2011	2011"2012	2012"2013
Average Total Assets	722,465,358.50	1,540,205,703.50	2,374,616,412.00	3,349,312,776.00
Average Total Equity Capital	159,646,196.50	254,013,608.00	366,849,810.50	492,642,966.50
EM Ratio	4.52542	6.06348	6.47299	6.79866
Growth rate		0.33987	0.06754	0.05031

Asset Utilization Ratio

DESCRIPTION	Year			
	2009"2010	2010"2011	2011"2012	2012"2013
Total Operating Income	80,259,740.00	153,143,277.00	229,331,692.00	333,460,007.00
Average Total Asset	722,465,358.50	1,540,205,703.50	2,374,616,412.00	3,349,312,776.00
Au Ratio	0.11109	0.09943	0.09658	0.09956
Growth rate		(0.10497)	(0.02870)	0.03090

Net Profit Margin Ratio

DESCRIPTION	Year			
	2009"2010	2010"2011	2011"2012	2012"2013
Net Income After Tax	19,224,873.00	44,462,821.00	49,516,308.00	77,494,498.00
Total Operating Income	80,259,740.00	153,143,277.00	229,331,692.00	333,460,007.00
NPM Ratio	0.23953	0.29033	0.21592	0.23240
Growth rate		0.21209	(0.25632)	0.07632

Appendix III

Financial ratios related with Liquidity Performance

Liquid Asset to Average Total Asset Ratio

DESCRIPTION	Year			
	2009''2010	2010''2011	2011''2012	2012''2013
Liquid Asset	628,651,586.00	849,818,712.00	1,107,250,306.00	1,201,402,410.00
Average Total Asset	722,465,358.50	1,540,205,703.50	2,374,616,412.00	3,349,312,776.00
LAATA Ratio	0.87015	0.55176	0.46629	0.35870
Growth rate		(0.36590)	(0.15491)	(0.23073)

Liquid Asset to Deposit Ratio

DESCRIPTION	Year			
	2009''2010			2012''2013
Liquid Asset	628,651,586.00	849,818,712.00	1,107,250,306.00	1,201,402,410.00
Deposit and Borrowing	820,934,637.00	1,526,318,840.00	2,117,296,898.00	3,050,439,303.00
LADST Ratio	0.76578	0.55678	0.52295	0.39385
Growth rate		(0.27292)	(0.06075)	(0.24688)

Loan to Deposit Ratio

DESCRIPTION	Year			
	2009''2010			2012''2013
Net Loan and Advance	364,768,987.00	654,701,523.00	1,006,422,931.00	1,597,536,574.00
Deposit and Borrowing	820,934,637.00	1,526,318,840.00	2,117,296,898.00	3,050,439,303.00
NLDST Ratio	0.44433	0.42894	0.47533	0.52371
Growth rate		(0.03464)	0.10816	0.10177

Appendix IV

Financial ratios related with Asset Quality Performance

Percentage of Loan Loss Provision Ratio

DESCRIPTION	Year			
	2009"2010	2010"2011	2011"2012	2012"2013
Provision For Loan	4,217,807.00	7,041,832.00	13,173,482.00	23,691,776.00
Gross Loan	368,986,794.00	661,743,355.00	1,019,596,413.00	1,621,228,350.00
PLL P Ratio	0.01143	0.01064	0.01292	0.01461
Growth rate		(0.06906)	0.21416	0.13105

Net Non Performing Assets to Net loan and Advances Ratio

DESCRIPTION	Year			
	2009"2010	2010"2011	2011"2012	2012"2013
Non Performing Loans	12,293,077.00	6,026,959.00	14,157,787.00	54,495,061.00
Net Loan and Advances	364,768,987.00	654,701,523.00	1,006,422,931.00	1,597,536,574.00
NPA to NLA Ratio	0.03370	0.00921	0.01407	0.03411
Growth rate		(0.72684)	0.52813	1.42489

Appendix V

Financial ratios related with Operating Expense Efficiency Performance

Expense to Total Income Ratio

DESCRIPTION	Year			
	2009''2010	2010''2011	2011''2012	2012''2013
Total Expense	61,034,867.00	108,680,456.00	179,815,384.00	255,965,509.00
Total Income	80,259,740.00	153,143,277.00	229,331,692.00	333,460,007.00
E/I ratio	0.76047	0.70967	0.78408	0.76760
Growth rate		(0.06680)	0.10487	(0.02102)

Overhead Efficiency Ratio

DESCRIPTION	Year			
	2009''2010	2010''2011	2011''2012	2012''2013
Non-interest Income	49,876,139.00	91,062,219.00	106,900,120.00	137,619,735.00
Non-interest expense	40,437,831.00	61,058,979.00	102,642,336.00	157,071,179.00
OE Ratio	1.23340	1.49138	1.04148	0.87616
Growth rate		0.20916	(0.30167)	(0.15874)

Net Interest Margin Ratio

DESCRIPTION	Year			
	2009''2010	2010''2011	2011''2012	2012''2013
Net Interest Income	15,156,529.00	29,510,072.00	67,036,089.00	132,117,657.00
Earning Assets	397,584,987.00	977,792,523.00	1,730,729,656.00	2,683,593,151.00
NIM Ratio	0.03812	0.03018	0.03873	0.04923
Growth rate		(0.20831)	0.28338	0.27106

DECLARATION

Advisee's Declaration

We, the under signed, declare that this senior essay/project is our original work, prepared under the guidance of (Ato Ahmed Mohammed). All sources of materials used for the manuscript have been duly acknowledged.

Name:

Signature

Date of submission

Advisor's Declaration

The paper has been submitted for examination with my approval as the University advisor.

Name _____

Signature _____

Date

Please attach your questionnaire item next to this page.



This work is licensed under a
Creative Commons
Attribution - Noncommercial - NoDerivs 4.0 License.

To view a copy of the license please see:
<http://creativecommons.org/licenses/by-nc-nd/4.0/>

This is a download from the BLDS Digital Library on OpenDocs
<http://opendocs.ids.ac.uk/opendocs/>