SAINT MARY'S UNIVERSITY COLLEGE
SCHOOL OF GRADUATE STUDIES

Determinants of Financial Performance of Commercial Banks: the Case of Private Commercial Banks in Ethiopia

BY

HAILEYESUS HABTEAB

ID No MBAAF3/0403/2006

JUNE 2016

ADDIS ABABA, ETHIOPIA

SAINT MARY'S UNIVERSITY COLLEGE
SCHOOL OF GRADUATE STUDIES

Determinants for Financial Performance of Commercial Banks: the Case of Private Commercial Banks in Ethiopia

A THESIS SUBMITTED TO SAINT MARY'S UNIVERSITY COLLEGE SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTSFOR THE DEGREE OF MASTER OF BUSINESSADMINISTRATION IN ACCOUNTING AND FINANCE

BY
HAILEYESUS HABTEAB

JUNE 2016

ADDIS ABABA, ETHIOPIA

SAINT MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Determinants of Financial Performance of Commercial Banks: the Case of
Private Commercial Banks in Ethiopia

APPROVED BY BOARD OF EXAMINERS

_____   _____

Dean, Graduate Studies   **Signature & Date**

_____   _____

Advisor   **Signature & Date**

_____   _____

External Examiner   **Signature & Date**

_____   _____

Internal Examiner   **Signature & Date**

DECLARATION

I the under signed, declare that this thesis is my original work, prepared under the guidance of my advisor.All sources of material used for the thesis have been duly acknowledged. I further confirm that the thesis has not been submitted either in part or in full to any other higher learning institution for the purpose of earning any degree.

_____

Name   Signature and Date

ENDORSEMENT

This thesis has been submitted to St. Mary's University College, School of Graduate Studies for examination with my approval as a University advisor.

_____   _____

Advisor   Signature and Date

Table of contents

ACKNOWLEDGEMENTS

List of Abbreviations

ACCA   Association of Certified Chartered Accountant

ATM   Automatic Teller Machine

EPS   Earnings Per Share

EVA   Economic Value Added

GDP   Gross Domestic Product

GNP   Gross National Product

NBE   National Bank Of Ethiopia

NIM   Net Interest Margin

ROA   Return On Asset

ROE   Return On Equity

SPSS   Statistical Package For Social Science

SSA   Sub Saharan Africa

List of Tables

List of Figures

Abstract

The rapidly growing economy and the effect of the globalization and the development of technology results banks to play an important role. Like any other industry the financial industry have different stakeholders. These stakeholders have different interest which may one way or another affect the performance of commercial banks. Therefore, the study aimed to examine factors determining the financial performance of private commercial banks in Ethiopia. Such factors are classified as the bank-specific, macroeconomic and industry specific determinants over the time period from 2005/2006 to 2013/2014. The bank's financial performance was measured by banks' profitability which in turn measured by profitability indicators of return on assets (ROA), return on equity (ROE)and net interest margin(NIM.) The study used a secondary financial data which are analyzed using the multiple regression models. The empirical results show that advertisement activities, Cost of Capital and employee profitability and import are found to be significant factor affecting the performance of Banks measured by ROA at 1% and 5% significant level respectively, but unexpectedly Investment on IT appear to a factor negatively affecting Return on Asset at 10% significant level. The performance of private commercial banks when measured by NIM is positively and significantly affected by branch network and import at a 1% significant level. However, NIM is negatively affected by Investment on IT and export at 5% and 1% significant level respectively. On the other hand, ROE is positively influenced by BRN, Cost of capital,export, import, EP and market share at 5% and 1% significant level respectively. These Results suggested that banks can improve their profitability through the efficient and effective utilization of banks assets on the one hand and by utilizing the external opportunities on the other hand.

Key words: - commercial banks; profitability

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The world has become a village due to the rapidly growing economy and the effects of globalization. Especially the development of telecommunications technology results an advance to the computerization of services. This had a direct relationship with the growing of electronic banking and internet based financial services and facilitates the transfer of funds from surplus units to those who are in need. Thus, in order to play the intermediary role those who are in surplus need to know the performance of deficit units(Guru, Staunton, and Shanmugan, n/d).

Banks are the backbone of the economy and play an important financial intermediary role; the performance of banks is very essential to the economy. The well-being of the banking sector is a direct reflection of the well-being of the economy and vice versa. Understanding the underlying factors that influence the financial sector profitability is very essential not only for the economy at large but also for different stakeholders and the management of banks. The awareness of those factors will help both the internal and external users to formulate policies as well as to improve the sector (Sufian and Chong, 2008).

besides that banks play a key role in improving economic efficiency by channeling funds from resource surplus units that is from savers unit to those with better productive investment opportunities or borrowers (Zerayehu, Kagew&Teshome, 2013).Thus, this financial activity is important in ensuring that the financial system and the economy run smoothly and efficiently. Banks also play key role in trade and payment system and significantly reduce transaction costs and increase convenience. Well-functioning financial markets and financial intermediaries are crucial to economic health (Mishkin, 2004).

The performance evaluation of banks is essential to provide information about the operating performance, its net worth and to understand the organization competitiveness and its

potentials. In addition to that financial performance analysis is useful for decision making to all stakeholders for internal and external users such as managers, creditors, stockholders, potential investors and regulatory agencies (Muhabie,2015).

The financial sectors are among the heavily regulated sectors in all economy. Because to protect investors and the public,who plays the intermediary role, and for the soundness of the system, regulating the sectorwere very essential(Mishkin, 2004). It is because that the financial sector remains always politically sensitive, regulating the degree of competition in a market, the protection of consumers of the financial services and the capital adequacy of the financial institutions to encourage investors, the public confidence and the prospect of contagion which is the collapse of one is the collapse of all are among the reasons why the financial institution is highly regulated (Howells and Bain, 2007)

Tesfaye (2014) Evaluates the determinants of performance of commercial Banks in Ethiopia from 1990-2012 highlighted the need to understand the performance of the bank and the aggregate economy. It is also important to understand the banking sector profitability was driven by factors related to the bank or from external sources or both. Because it will be helpful to know which factors drive the performance? Is it endogenous or exogenous factors drive the performance of banks in Ethiopia?

Ongore, V. and Gemechu (2013) and Tesfaye(2014) evaluated the bank specific determinants of profitability. Bank specific factors may relate to the banks over all managerial practices on capital structure, liquidity management, credit risk, loan portfolio management, expense management, and diversification of a banks line of products or activities (Oino, 2015). The second group of determinants relates profitability to the macroeconomic environment within which the banking system operates was GDP, inflation and interest (Athanasoglou,Brissimis, and Delis, 2005).

The other and the third group of determinants which were the industry specific factor affect bank profits, are market share, the level of competition in the industry, barrier related to entry and exit, the nature of the regulation and supervision, monetary and physical policies are

among others. Those factors over which the management of the bank lacks control are external to the bank (Oino,2015).

Other studies emphasized that banks performance could also be affected by the ownership structure classified as domestic (Private), Government, and foreign owners. The excessive engagement of the government in financial sector is justified on grounds that public ownership of banks serves to boost their role as conduits for channeling funds to the underserved sections of the economy. But the study indicates based on the Pakistan experience for two decades government ownership of banks resulted in completely ineffective operationally as well as financially (Aftab, Samad, andHusain, 2015).

While reviewing the previous studies, the sum totals of expenses are used to evaluate management efficiency. Consideration of those expenses which had a short or long term impact on profitability of banks was not considered in the previous study. In addition to that the macro-economic variable GDP were studied in the aggregate rather than for each component. In Ethiopia where the service sector is ahead of the other economic sector evaluating each part of the macro variable is very essential. Thus this study will focus on those variables which have a long term and short term impact and on those details of the macro economic variables.

Finally, despite the financial sector history of Ethiopia, the experience in a competitive environment and the lack of enough research on the area demands to fill the gap. The study follows the footsteps of Rao, and Tekeste (2012),on determinants of profitability of commercial banks in developing country evidence from Ethiopia. The focus of the research was on three grounds. The first was the limited stock of knowledge on determinants of bank profitability in Ethiopia. The second was the lack of consensus in the banking literature on the factors that affect bank profitability. The third was the growth and development of the Ethiopian banking sector.

1.2. Statement of the Problem

Financial institutions are firms and their behaviors were analyzed in much the same way that economists analyzed any other type of firm. Like any other industries the financial industries

have different stakeholders. These stake holders have different interest based on their objective. Among those stakeholders'employees and management are internal factors motivators. On the other hand government including regulatory bodies, creditors, depositors, investors, stockholders and the public are the external factor motivator.

Since banks have a public interest, government has an obligation to protect the interests of the public. On the other hand, government development activities as well as its day-to-day operation depend on the tax collected from different persons (natural and legal persons). Therefore the determinants of banks performance are the area of concern for government.

Creditors particularly depositors have the other point of concern, which depend on the profitability of the bank's performance. Furthermore anything happens in the sector has a contagious effect to other banks and bring over all financial crises and lose the deposit they have made. Thus it is natural that the concern of creditor for any of the variable which determine profitability of banks.

Investors, (Private or Government) who are one of the beneficiaries of the financial intermediary, are dependent of the bank's performance. Because the performance of any company depends on the short or long term finance collected from banks. Banks' ability to finance investors depends on the performance of each bank. The higher the banks liquidity position the higher the probability of investors to get finance. Since banks are the intermediary for the flow of funds from those who have the surplus to those who are in need. Hence for the continuation of their investment on the one hand and as a supporter of government development activities on the other hand each variable that will hinder the performance of banks could be investors' concern.

The banking sector in Ethiopia is experiencing growing profitability and positive trends in balance sheet expansion, however; the contributing factor whether internal or external, to the highest profitability earned by the industry was not fully analyzed. Furthermore understanding those determinants of the banking sector profitability, internal or external factors were very important (Tesfaye,2014).

Lack of consensus among researchers on the impact of GDP on the performance of banks raised a question. Analysis of impacts of GDP on profitability indicates that GDP has no significant influence on the ROA and ROE(Alper, and Anbar(2011);Rao, and Tekeste,(2012);Tesfaye, 2014). On the other hand Rachdi,(2013); and Obamuyi(2013) GDP growth has positive and significant effect with ROA, ROE and NIM. Since different research had a different conclusion on the impact of GDP. Thus, exploring the impact of GDP on the performance of banks by disaggregating its component was the area of the study.

Moreover, investments and expenses which are big in amount incurred for use of technology, for advertising and for labor are not studied independently. Because these variables were the determinants of the banks short term and long term performance.

Based on the previous studies on the determinants of commercial banks performance, internal factor, (the impact of advertising, branch network, employee productivity, investment on technology) examined how efficient the management is in keeping its long term and short term efficiency whereas the other internal factor, cost of capital, studies how efficient the management is in managing its capital. The external factor export and import and the industry factor market share were examined how the external environment affects the performance of private commercial banks. Identifying, which one of the variables were the basic determinants of the performance of banks was the area of concern of this study.

1.3 Objectives of the Study

1.3.1 General Objective

The general objective of the study is to explore determinants of financial performance of private commercial banks in Ethiopia.

1.3.2 Specific Objectives

- To identify the impact of bank specific determinants of profitability of commercial banks in Ethiopia
- To assess the effect of macroeconomic factors on the profitability of commercial banks in Ethiopia.

- To examine the effects of industry specific factors on the profitability of private commercial banks in Ethiopia.

1.4 Research Hypotheses

In order to achieve the objective of the study, a number of hypotheses were tested regarding the determinants for profitability of private commercial banks in Ethiopia based on different empirical research. This testable hypothesis could be formulated as follows

H1: Investment on technology has a positive effect on the financial performance of Ethiopian private commercial banks (INT)

H2: Branch network has a positive effect on Ethiopian private commercial banks financial (BNE).

H3: Employee productivity (profitability per employee) has a positive effect on Privatebanks' financial performance (EP)

H4: Advertising expense has a positive effect on Ethiopian private banks performance (ADV)

H5: Cost of capital has a positive effect on Ethiopian private commercial banks Financial performance (CC).

H6: Export has a positive impact on Ethiopian private banks' financial performance (EXP)

H7: Import has a positive impact on Ethiopian private banks' financial performance (IMP)

H8: Market share has a positive impact on Ethiopian private banks' performance (MS)

1.5 Significance of the Study

A number of researches have been conducted on the determinants of financial performance and diverse empirical results were observed as to the factors. In this regard the outcomes of this study were expected to provide additional and valuable information regarding the determinants for profitability of private commercial banks in Ethiopia and its impact to the stakeholders. Finally it would be very helpful to managers as internal user and for regulatory bodies and other external users based on the information provided or the results of the study to make decision concerning the profitability determinants of private commercial banks in Ethiopia.

1.6 Scope of the study/ Delimitation/

This study is based on accounting data reported to the public every year. In addition to that it is based on historical cost data. The accounting practices used for determining the profits and assets valuation may differ between firms. Besides all the disclosures attached may not have all the required data in detail. The differences in size in terms of branch network, capital, efficiency, quality of labor and others are the limitation. In addition to that the difference in age of private commercial banks is also among the limitation in this study. Since banking sector was among the highly regulated business sectors in Ethiopia, using the accounting information available at the annual report makes it trustworthy. Note that reporting procedures and requirements for all banks are stipulated by the National Bank of Ethiopia (Directive No SBB/43/2007).

The study limited itself to annual financial reports and disclosures of the financial statements of private commercial banks in Ethiopia. On the other hand the study is limited only to the private commercial banks.

1.7 Organization of the Study

The research paper divided and organized in five chapters. Chapter one constitute background of the study, statement of the problem, objective of the study, research hypothesis, significance of the study, scope or delimitation of the study and Organization of the study. Chapter two shows theoretical literatures review which are indicators of bank performance,

empirical literature back ground of banking industry in Ethiopia. Chapter three contains the research methodology of the study. Chapter four discusses the research findings with analysis of empirical results. Finally the last part of the paper chapter five presents the conclusion and recommendation.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Theoretical Review

2.1.1 Bank Performance

Ongore (2013) stated when measuring bank performance was started and stated that, since the 1940's great depression the financial performance analysis of commercial banks has been of great interest to academic research. But on the other hand a more organized study of bank performance started in the late 1980's. It is because financial intermediaries perform key financial functions in economies, provides a payment mechanism, match supply and demand in financial market (Levine, 1997). According to Alper,D. and Anbar, A. (2011) deal with complex financial instruments and market provide market transparency. In most economies banks are financial intermediaries. The efficiency of banks could affect the growth of the economies in both ways. Financial development critically affects the speed and pattern of economic development. The development of the financial system is a good indicator of the future economic growth (Admasu,2014).

Good financial performances attract different stakeholders due to their interest attached with the banks. As a result of this stakeholders are concerned to the performance of banks. European Central Bank, (2010)explained that different stakeholders in bank view performance from different angles, for example, depositors are interested in a bank's long-term ability to look after their savings; debt holders, on the other hand, look at how a bank is able to repay its obligations; a concern taken up by rating agencies. Equity holders, for their part, focus on profit generation, i.e. on ensuring a future return on their current holding. This focus is reflected in the valuation approaches of banks' analysts, who try to identify the fundamental value of the firm. Managers, too, seek profit generation, but are subject to principal-agent considerations and need to take employee requests into consideration.

Although banking attracts different stakeholders, it affects those involved. Among those participants, institutional investors such as pension funds, mutual funds, hedge funds and

private equity funds. These investors contribute to the development of capital market which has deeply transformed the banking sector. The other stakeholders were bank regulators. Deposits mobilized from households' savings, the credit flowing towards investments fosters economic growth, and banking operation affects the liquidity and the spending capacity of the economy. Such activities made banks to contribute to the economic development. Thus the efficiency and the stability of the banking system maximize the benefits of the banking sector; there is the need for a strict supervision (Antonio, M and Munari, 2015).

Different researchers evaluate the performance of commercial banks. Their study focuses the impact of internal and external factors. Internal factors which have the direct interference of the management. But the external factors have no direct control by the management but reflect the economic and legal environment (Rao, and Tekeste, 2012).The environment within which a bank operates would be expected to have an impact on the profitability of the bank. To this effect, the external factors can be analyzed by examining the overall economic scenario within which the bank operates. It is obvious that a sound and profitable banking sector can withstand negative shocks and contribute to the stability of financial system. As a result commercial banks play a significant role in the economic growth of countries (Athanasoglou, Brissimis, & Delis, 2005).

Management efficiency is one of the key internal factors that determine the bank profitability. But measuring management efficiency requires getting deep understanding of the management system (Tesfaye, 2014). In addition to that governance influence bank performance, an integrated view of risk as well as an adequate level of knowledge of members of the board of directors and their willingness to acknowledge adverse developments and challenges is so important according to (European Central Bank, 2010).

Wheelock, (1995) explained that management quality is difficult to measure directly because it can take several forms on the other hand managerial inefficiency could be reflected by excessive use of, or payment for, physical plant or labor, or excessive deposit interest cost. In addition to that it increases the likelihood of bank failure. Apart from excessive risk taking; banks that are poorly managed are thought to be prone to failure.

Athanasoglou, Brissimis, & Delis, (2005) discussed, capital was important in explaining bank profitability. On the other hand exposure to credit risks lower profits. Labor productivity growth has an impact on profitability and operating expense management also influence bank performance. On the other hand the external determinant of bank profitability such as inflation affects bank profitability.

European Central Bank (2010) explained the industry specific, concentration affects profitability. In addition to that, although banking institution has become increasingly complex, the key drivers of bank's performance remain earnings, efficiency, risk-taking and leverage. The other point considered highly leveraged banks, banks with low earnings, low liquidity, or risky asset portfolios are more likely to fail than other banks (Wheelock, 1995).

2.1.2 Economic Value Added versus Profit-Based Measures of Performance

EVA was developed by the US consulting firm Stern Stewart & Co. It explained that a successful performance measure evaluates how well an organization performs in relation to its objectives. Meanwhile, the primary objective of any commercial organizations assumed to be the maximization of the wealth of its shareholders. But many organizations use profit-based measures as the primary measure of their financial performance. There are two problems relating to profit in this area the first is profit ignores the cost of equity capital. Companies only generate wealth when they generate a return in excess of the return required by providers of capital both equity and debt. The calculation of profit does take into account the cost of debt finance, but ignores the cost of equity finance. Therefore profits calculated in accordance with accounting standards do not truly reflect the wealth that has been created (ACCA Student accountant Technical Article, n/d).

According to Stewart (1982) cited from Antwi ,Mensah, , Crabbe, and Antwi(2015) the Economic Value Added (EVA) as an overall yardstick of organizational performance is both a specific performance measure and the basis for a larger performance measurement framework. EVA is a financial performance measure that is directly linked to the creation of shareholder value over time. EVA is designed to offer managers better information and motivation to make decisions that will create the greatest shareholder wealth.

2.1.3 Why regulation of Banks

According to Howells (2007) financial market and institution explains why regulation is in need? Is because the presence of the market ideal of perfect competition, the presence of monopoly, or oligopoly, the presence of externalities and the lack of information. The ignorance of consumers relative to producers and the political sensitivity of financial services demand the regulation of financial markets. It may be concerned with the degree of competition in a market, the protection of consumers of financial services, the encouragement of small investors, the capital adequacy of financial institutions, the ability of small firms to obtain venture capital. On the other hand the *prospect of contagion*. This, in turn, might have serious consequences for the real economy. Contagion might arise to the extent that a failure of one bank causes a loss of confidence in banking in general. The other concern is with *consumer protection, t*he efficiency of a modern economy is greatly enhanced by the development of the financial system and thus it is desirable that as many people as possible participate in that system. In addition to *that their liabilities form the means of payment*. Thus, bank regulation aims to guarantee the integrity of the transactions medium and to prevent the process of financial intermediation from failing.

The theory of regulation emanates from different perspectives. Howells (2007) et.al explains the possibility of market failure, together with the political sensitivity of financial services, provides firm support for some level and form of the regulation of financial markets. Regulation creates moral hazard. That is, it causes people to behave in a counterproductive way. Regulation results in agency capture. Regulation creates compliance costs (the costs of adhering to the regulations) for producers. As financial services became an increasingly international industry, governments became concerned about the competitiveness of their domestic financial industries hobbled by tight regulation. According to Heimler (2006), the need for regulation evaluated for the from macro- economic concerns, to address concerns over the safety and stability of financial institutions, competition and to avoid asymmetry of information between banks.

According to Bonn (2005), the regulatory restrictions served for social and economic policy objectives of governments. On the other hand it will serve to allocate finance to preferred

industries; restrictions on market access and competition were motivated by a concern for financial stability, protection of small savers and to those with limited financial knowledge were an important objective of controls on banks (Bonn, 2005).

2.1.4 Bank Performance Indicators

Different researcher classified the performance indicators using either three or two instruments. According to Rachdi, (2013) and Athanasoglou, Brissimis, & Delis (2005), internal, external and industry specific factors are considered the three factors which are categorized the determinants of profitability. Whereas Ongore (2013),in his study divided the determinant factor by deviating from others and explained the determinant factor through internal, external and ownership identity.

On the other hand study made by Cekrezi (2015),Alper, and Anbar(2011); International Monetery Fund, (2009);Admasu (2014); Frederick (2014);Sufian, and Chong (2008),divided the indicators of bank performance in to two, which are internal and external specific factors. Further, explained that internal factors are factors which are under the control and influence of the bank management and the board. But an external factor is independent of the management control and depends on the external environment.

According to Sufian, and Chong (2008), ROA, ROE and NIM are considered the indictors of profitability. Most of the scholars used the traditional accounting measures of analysis towards determinants of banks' profitability; ROA and ROE (Fentaw, 2015).

2.1.4.1 Dependent Variables

i.   Return on Asset

The return on assets (the ratio of net profit to total assets) measures the capability of bank's management to make profits from its assets. It is a good indicator of how well a bank's management is managing the assets of the bank; in addition to that bank profitability is best measured by ROA for two primary reasons. One of the primary reasons is that ROA is not distorted by high equity multipliers and the second is that ROA reflects a better measure of a bank's ability to generate returns on its assets (Rivard and Thomas, 1997).

ROA indicates the efficiency of the management of a company in generating net income from all the resources of the institution as, state that a higher ROA shows that the company is more efficient in using its resources (Ongore, 2013, cited from Khrawish, 2011 and Wen, 2010).

ii.   Return on Equity

Brigham and Houston (2007), explained that the most important ratio is ROE, which tells us how much stake holders are earning on the funds they provide to the firm. When ROE is high the stock price tends to be high. So actions that increase ROE generally increase the stock price. On the other hand the relationship between ROA and ROE is explained by EM (equity multiplier) which is the result of assets divided by equity tells what happened to the ROE when a bank holds a smaller amount of capital.

According to European Central Bank (2010), the ultimate purpose of any profit -seeking organization is to preserve and create wealth for its owners; but in order to create shareholder value the bank's return on equity (RoE) needs to be greater than its cost of equity. It is the most popular measure of performance, It is sometimes decomposed into separate drivers: called the "Dupont analysis"(Equity Multiplier), where *RoE = (Pretax profit / Operating income)*(Operating Income / Net revenue)*(net revenue / Assets)*(total assets/equity)*. The first element is the Pretax profit margin, the second is an operating margin, the third is asset turnover and the last corresponds to the financial leverage. Even though RoE is the most well-known performance indicator widely used by market participants. RoE does not escape from critics that it has exposed banks to higher unexpected risk levels and opened the door to a more short term- oriented approach. The financial crisis has shown how ROE failed to discriminate the best performing banks from the others in terms of sustainability of their results. It is a short-term indicator and must be interpreted as a snapshot of the current health of institutions. It does not take into account either institution's long-term strategy or the long-term damages caused by the crisis.

iii.   Net Interest Margin

Another method of measuring bank performance Mishkin (2004), explained the net interest margin (NIM).The difference between interest income and interest expenses as a percentage

of total assets. It reflects the extent to which a bank's earning assets is profitable. One of a bank's primary intermediation functions is to issue liabilities and use the proceeds to purchase income-earning assets. If a bank manager has done a good job of asset and liability management such that the bank earns substantial income on its assets and has low costs on its liabilities, profits will be high.

How well a bank manages its assets and liabilities is affected by the spread between the interest earned on the bank's assets and the interest costs on its liabilities. This spread is exactly what the net interest margin measures. If the bank is able to raise funds with liabilities that have low interest costs and is able to acquire assets with high interest income, the net interest margin will be high, and the bank is likely to be highly profitable. If the interest cost of its liabilities rises relative to the interest earned on its assets, the net interest margin will fall, and bank profitability will suffer (Sheefeni, 2015 and Frederick, 2014).

2.1.4.2 Independent Variables

Internal determinants are bank specific variables which influence the profitability of specific bank. Internal factors are influenced by the bank management. Like other variables management efficiency can be explained through (investment on information technology, Employee productivity (profitability per employee), advertising expense and number of branch) and on the other hand risk and capital management can be analyzed by cost of capital which could affect the bank's performance. Each of these indicators is further discussed.

I. **Management Efficiency**

According to Ongore (2013) andCekrezi (2015), management efficiency is one of the key internal factors that determine the bank profitability. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. Operating expenses appear to be an important determinant of profitability. However, their negative effect means that there is a lack of efficiency in expenses management. As a result banks shift their inefficiencies orpass part of increased cost to customers and the remaining part to profits.

Yet, some financial ratios of the financial statements act as a proxy for management efficiency. According to Rao(2012) cost to income ratio is used as a proxy for bank's operational efficiency or expense management. The cost to income ratio is considered as an explanatory variable since it shows how a bank's management is operationally cost efficient in managing the affairs of the bank, which will eventually have an impact on the bank's profitability (Rao, 2012).

The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios. It is represented by different financial ratios. Such as management efficiency can be explained through investment cost incurred on technology divided by net profit or deposit; employee productivity is expressed on profitability per employee, advertising expense divided by net profit (Ongore,2013).

According to Frederick (2014), bank operating expense should be considered as a determinant and prerequisite for improving bank performance, since expenditure are controllable expenses and if it is efficiently managed can contribute positively to the performance of commercial banks (Frederick, 2014).

- *Information Communication Technology*

Farouk (2015),the study explained the term information technology usually refers to a computer-based system, one that is designed to support the operations, management, and decision functions of an organization. Information systems in organizations thus provide information support for decision makers. Information systems encompass transaction processing systems, Management information system, decision support systems, and strategic information systems. Agbolade (2011), explainedapplication of information and communication technology concept, techniques, policies and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and a prerequisite for local and global competitiveness. ICT directly affects the various management functions of planning, organizing and the nature of services offered in the banking industry (Ho and Mallick, 2006).

Binuyo(2014),explained ICT investment, according to him the information and communication technology infrastructure of an organization comprises of its physical ICT asset. The business functionality of an organization depends on the reach and range of the stock of this resource. In addition to that the stock of IT can only serve as a source of competitiveness advantage if and only if they outperform equivalent assets of competitors. These assets, however, become sources of advantage when their synergetic benefits are exploited to enhance the organizational objectives.

- *Employee productivity*

Currently increase in global competition in every direction makes banks to use competent employees on the one hand and efficient technology on the other hand. Scoring high levels of productivity forced them to reorganize their resource utilization. Which is increasing employee productivity through employee productivity is becoming vital. Banks increase their profits from improved labor productivity, which, among other things, is a result of the higher quality hired labor. To examine improvements in productivity can be measured by real gross total revenue over the number of employees (Athanasoglou, Brissimis, & Delis, 2005).

- *Advertising*

The other which is considered as performance indicator and determinants of profitability was advertising expense. In today's competitive environment both internally and globally banks are expected to reach their customer. Banks offer a wide range of financial intermediary services, to personal and business customers; some of these services which are bank account, guarantees, and investment adviser are needed by an appreciable number of customers, but many other financial intermediary services such as import/export services, money transfers, credit cards have to be brought to the attention of potential users, who then must be persuaded to use them many of the services offered by banks are also offered by rival organizations. To do this successfully, bankers need an understanding of the process of marketing, which will aid in improving banks performance (Adeleke, 2015).

One of the marketing function advertising involves in communicating the company's or brand's value proposition by using paid media to inform, persuade, and remind consumers.

Advertising can succeed only if advertisements gain attention and communicate well. Promotion is regarded as the marketing function concerned with persuasive communication to target audience in order to facilitate exchange between banks and their customers. Promotion mix include –advertising, personal selling, sales promotion and public relations (Kotler, 2012).

Ojo (2012), marketing productivity, include two of the dimensions, efficiency as well as effectiveness, which is getting loyal customers at low marketing costs. Kotler, (2012) in his book states that measuring advertising effectiveness and the return on advertising investment has become a hot issue for most companies, especially in the tight economic environment. However, sales and profit effects of advertising are often much harder to measure. Because sales and profits are affected by many factors other than advertising—such as product features, price, and availability. One way to measure the sales and profit effects of advertising is to compare past sales and profits with past advertising expenditures.

- *Branching*

Carlson, (2005) an argument commonly articulated in the literature is that branch banking stabilizes banking systems by reducing their vulnerability to local economic shocks: branching enables banks to diversify their loans and deposits over a wider geographical area or customer base. Restrictions on branching have been linked to the instability of banking systems. There are a number of potential sources of spillovers such as larger networks attracting more consumer deposits, a reduction in costs through economies of scale, or a diversification of risks through geographic expansion. Since the growth in branching is attributable largely to shifts in the relationships of banks with each other, technological progress, and economic growth (Wheelock, 1995).

II. Risk and Capital Management

Capital, risk, and strategy are deeply connected in banking. Because capital management is inherently linked to risk and a bank's risk appetite influences its strategic choices. Capital management is the way that risk management finds expression in bank strategy at the highest

level. Capital is absolutely interlinked with strategy; a bank's risk appetite depends on many factors, including its competitive landscape, its existing competencies, and its footprint, a growth aspiration and taking a market share (CFO Reaserch Service, 2010).

Wheelock (1995), mostly regulators evaluate banks on five criteria which are capital adequacy, asset quality, management, earnings and liquidity (CAMEL) based on the criteria the managerial inefficiency banks with high loan to asset ratio, poor quality loan portfolios, banks with low earnings and less capitalized banks are at greater risk of failures.

Likewise the repercussion of the global financial crisis demands, investors in search of reassurance banks to build capital reserves and reduce leverage. In addition to that massive injections of taxpayer bailout funds allowed regulators around the world to strongly encourage many banks to hold capital well in excess of current minimum requirements. Shareholders are always looking through the long-term, sustainable return on equity; and ROE is a huge focus at any bank. Therefore in order to show shareholders a profit growth and return on equity that's larger than your cost of Capital and what the market is doing. Cost of capital and return on equity are paramount in proving whether the strategy works (CFO Reaserch Service, 2010).

- *Cost of Equity*

Mishkin (2004), explained a common stock, is the principal way that corporations raise equity capital. Holders of common stock own an interest in the corporation consistent with the percentage of outstanding shares owned. This ownership interest gives stock holders a bundle of rights. The most important are the right to vote and to be the residual claimant of all funds flowing into the firm. Stockholders are paid dividends from the net earnings of the corporation.

King (2009), the cost of equity is typically defined as the expected return that investors require to purchase common stock in a firm. It is therefore an important input for bank management, when raising capital and making investment decisions and for investors when they value equity securities and construct their portfolios. Common equity is the first category of bank capital available to absorb losses; the greater this cushion, the more losses a bank can

withstand while remaining financially viable (Oino, 2015). For this reason, common equity is also the most expensive form of bank capital, as investors expect to be rewarded for the greater risk they bear through some combination of dividends and capital appreciation. Even though banks must hold capital for regulatory purposes, only a few studies provide estimates of the cost of equity for financial institutions. Most corporate finance studies exclude banks, arguing that the role of leverage, taxes and other factors is different in this highly regulated sector (King, 2009).

Zimmer (1991),the cost of capital is the rate of return that a company has to offer finance providers to induce them to buy and hold a financial security. This rate is determined by the returns offered on alternatives securities with the same risk. Differences in bank cost of capital may arise from differences in national saving behavior, micro economic stabilization policies, industrial organization, financial policies and taxes. The cost of capital for banks differs from the cost of capital for industrial firms is because despite the fact that banks are more highly leveraged than commercial firms and required capital ratios.

According to Zahra Sarvani (2015), explains market share indicators based on deposits show the market share through the proportion of local banking system in banking market. The more indicators demonstrate the higher banks' market share in the money market. In addition to that, the share of saving deposits which is the cheap resources for banks as well shows that what percent of saving deposits of banking system are belonged to each bank. On the other hand market share based on the share of branches is an effective factor considered as customer contact points. Branches as market contact points play an important role in capturing market share. The more branches the more market share for banks. The other indicator based on bank's share of market of banking services which is share of banking and deposit services. The more banks share of banking and deposit services in today's competitive world is dependent on the widespread use of e-banking services. One of the main goals mentioned in e-banking is answering the need of people for banking services and linking central banks' systems through automation systems of interbank operations. Development of e-banking services includes internet bank, mobile bank, SMS bank, sales terminals and ATMs indicates the high quality of banks in competitive market. Customers have a positive attitude toward a

bank providing speed, security, accuracy and ease of use of banking services. On the other hand customers are drawn to banks with high market share and branches located in large and small commercial centers and ATMs in some hotels and public and private organizations.

The other researcher Genchev(2012), stated that market share reflects the current competitive position that a firm attains in the marketplace, in addition to that high market shares are considered to satisfy customers' needs and, therefore, enjoy a competitive advantage against their smaller competitors. Two theories are explained in the study to explain how the degree of sector concentration affects bank profitability. The structure-conduct-performance hypothesis (also referred to as the market-power hypothesis) states that a more concentrated sector favors bank profitability motivated by the benefits of greater market power, because the setting of prices that are less favorable to consumers by lowering deposit rates and higher loan rates due to imperfections in these markets that will lead to monopoly profits. On the other hand, the efficient structure theory explains the positive relationship between concentration and profitability.

III.   Macro -Economic Management (External factor Variables)

- *Gross Domestic Product*

The output of the economy consists millions of different goods and services. We need a single number that summarizes the output. The measurements are the expenditure equals income view, the national income equals the national expenditure measurement which is the sum total of individual households and firms. Gross national product used until recently as a measure of national output (Beardshaw, 1998).

Gross national product [GNP] is the standard measure of the output of an economy and sums up the total money value of the goods and services produced by the residents of a country during a specified period. Whereas GDP is the goods and services produced inside or within the given country. It enables policy makers to determine whether the economy is contracting or expanding and whether a severe inflation or recession threatens. Three approaches are used in measuring GDP, each of which yields the same result. These are the final good approach, the value added approach and the income approach. The final good approach to GDP adds up

the total money value of goods and services produced. The value added approach measured by calculating the value added at each stage of production. The income approach measures the income generated by selling products (Samuelson, 2010).

In order to avoid the double counting of final goods and intermediate goods, in the final good approach, the value of the final goods of the economy is to consider where those goods go. Some are used by consumer, **consumption**, some are used by firms, **investment**, some are purchased by government, **government spending**, and some goods are exported, **export** and then subtract what we have imported (GDP= C+I+G+X-M)(Samuelson, 2010).

- *Consumption*

A measure of personal income is arrived at by totaling income before tax from all sources including transfer payments. Stiglitz (2000)If income taxes and transfer payments are taken away we arrive at personal disposable income. It is divided in to two which is the saving and the consumption part. It is the largest component of GDP equaling about two thirds of the total in recent years. It comprises durable and nondurable goods, food and services which the rapidly growing part Samuelson (2010). The house hold and individuals are consumers of durable and nondurable goods. Consumption plays a big role in the economy, if consumers decided to spend less the demand for goods and services will decline. In the United States consumption had a big role amounted to 66% of GNP (Hayman, 1989).

- *Investment*

In order to produce consumer goods we need capital goods, the economy must produce capital goods. Therefore we need to count investment goods as part of the national product. Nations devote part of their output to production of durable capital goods that will increase future production. Increasing capital requires the sacrifice of current consumption to increase future consumption. Gross investment represents the acquisition of new capital goods by business. Investment is the purchase of final product by business firms for use in production or as addition to inventories (Samuelson, 2010).

- *Government Expenditure*

Government expenditure is the wages of all government employees plus goods the government buys from the private sector. The government expenditure was always equal to its revenue. But the government can spend more than it rises in taxes, by borrowing. If the economy is in a serious recession the government may have to increase expenditure a great deal to raise output to the full employment level. Increased government expenditure can have a powerful effect in stimulating the economy(Samuelson, 2010).

Mishkin (2004), explained how government fiscal imbalances may create fears of default on the government debt. As a result, the government may have trouble getting people to buy its bonds and so it might force banks to purchase them. Fears of default on the government debt can also spark a foreign exchange crisis in which the value of the domestic currency falls sharply because investors pull their money out of the country. The decline in the domestic currency's value will then lead to the destruction of the balance sheets of firms with large amounts of debt denominated in foreign currency. These balance sheet problems lead to an increase in adverse selection and moral hazard problems, a decline in lending, and a contraction of economic activity.

- *Import and Export*

Unless and otherwise the given country has a closed economy there will be an import and export of goods and services in the economy. International trade can have a powerful effect on the national output. Export expand the market for domestic good, import decrease it. Import and export affect the aggregate expenditure. When household's income rise they not only buy more domestically made consumer goods, they also buy more goods from abroad (Beardshaw, 1998).

2.2 Background of Banking Industry in Ethiopia

2.2.1 Before 1991

The history of Ethiopia took us back to1905; where Ethiopia introduced the modern banking system. Soon after as a result of the Italian invasion, the country has become under the influence of fascist Italy whereby other new colonial banks had operated. Nevertheless, the financial system passed through three different political influences before the current regimes.

The monetary and banking policies of those political regimes influenced the development of the financial sectors. Until 1963 the state bank of Ethiopia serves both as a state bank and commercial bank and then National Bank of Ethiopia was formed. The NBE fixes both interest and lending rate and administers the foreign exchange.

Especially the 1974-1991 period was a state led banking system. The activities were centrally planned. There was no competition strategy, focused only on meeting the government objectives. Currently the modern banking system has reached to 110 (1905-2008) years of experiences (Alemayehu, n/d).

2.2.2 After the 1991

After 1991 different reforms has taken place after the change of government and the new era of market economy has been established. Exchange rate devaluation was the first reform from birr 2.07 to birr 5 and foreign exchange auction introduced. The financial reform define NBE's role in administering commercial banks introduced the minimum deposit and lending rate. The banking sector was regulated by Directive Number 592/2008.Establishment of domestic owned banking and insurance allowed. Continued its reform after 1994 financial liberalization decreased the interest rate for deposit to 6% and liberalized the lending rate Addison, and (Alemayehu, 2002).

Ethiopia is one of the SSA countries where by Commercial banking sector liberated from the government control after 1991, where commercial banks can be by private owners i.e. restricted to the citizens of Ethiopia. Private commercial banks pass through different stage of reforms for the past two decades focusing on improving the performance of the sector (Frederick2014).

The government allows private ownership of banks restricted to the Ethiopian citizens. Introduced a new banking and monetary proclamation. The introduction upon the proclamation states the need for regulation because banks play an important role in economic

development through mobilization of funds within and outside the country and channeling such funds to various sectors of the economy (Admasu, 2014).

Moreover, the last ten years can be considered as a reform period where the banking sector advances in using the technology and these reforms led banks to have a more technological based service giving. This has created changes in internal banking operation, relationship with customers and interbank interactions. Such as the introduction of national payment system by the NBE, ATM machines, mobile and internet banking services are seen within the banking system. As a result competition through technology based service delivery creates performance difference among banks plus the revenue and costs of the banks has raised (Zerayehu, 2013)

The banking system is making a lot of progress during the period under study. According to the National Bank of Ethiopia (2014/15)quarterly report, during the year 2000 one branch could serve 224,719 people and these figures has been decreased to 49,675 people during the year 2014 period which is a decrease in 77% from what has been fifteen years before. In addition to that the role of private banks was increased; the number of branches and the capital of private banks increased its share from all public banks to 58% and 55% respectively.

According to African Economic Outlook (2015), Ethiopia's banking sector is stable and sound. The system-wide capital adequacy ratio stood at a comfortable 17.5%, above the BASEL 8% requirement. Return on assets and return on equity showed solid performance, at 3.1% and 44.6%, respectively. The NBE regularly monitors virtually all commercial banks have risk adjusted capital adequacy ratios well above the minimum requirement. The loan portfolio of banks also continues to be sound and the ratio of non-performing debt is currently below the 10% target (at about 2.1%). Growth in deposits has been robust and the share of savings and time deposits in total deposits has risen.

Studies made on the banking environment of commercial banks in Ethiopia concentrate like other foreign studies on the management efficiency, capital Management and quality of asset (Tesfaye, 2014; Admasu, 2014; Muhabie, 2015 and Zerayehu.S. 2013).

Rao (2012) and Tesfaye (2014) despite the differences between the demand and supply of the banking service, the Ethiopian banking sector has shown a rapid progress in terms of number of private Commercial banks, total asset and capital. Currently banks are engaged in increasing the number of branches.

According to Tesfaye (2014)from 1990-2012, the Study made on the determinants of Ethiopian commercial banks performance , inflation is found to have a positive and significant effect, On the other hand in exploring the determinants of profitability in developing country from 1999-2009 Rao (2012) indicates that internal factors were the most determinants of bank profitability in Ethiopia, factors over which a bank's management had control. This indicates that the efficiency of management was very much vital for the performance of the banks. According to this study, expense management or operational efficiency of banks were statistically significant and negatively correlated with profitability.

2.2.3 Regulation and the Ethiopian Banks

According to Howel et al (2007), the theory of regulation emanates from different perspectives, the possibility of market failure, to protect savers and the political sensitivity of financial services provides firm support for some level and form the regulation of financial institutions. With this development the Ethiopian banking sector is part and parcel of the international financial services process. According to a proclamation to provide banking business, 592/2008, the need for the regulation stated that the role of banks in channeling funds within and outside of the economy. Having a central place in the payment and settlement, banks has a potential in creating economic instability, to insure the safety and soundness of the financial system are the basic issues to establish a legal frame work.

Even though since the mid 70's there has been a significant process of the regulatory reform in the financial system of most countries (Bonn, et. al. 2005). But Ethiopian banking system is characterized by a tight controlling regulatory restriction. Such as, interest rate is determined by the central bank, there has been strict control on investment restrictions on financial institutions, regulation on ownership linkage among financial institutions, restriction on the

entry of financial institutions, control on foreign exchange transaction are some of the regulatory requirement for Ethiopian banks proclamation 592/2008, directives No SBB/24/99, Directives No SBB12/96, Directive No SBB/30/2002, Directive No. SBB/46/2010. As Heimler,et.al(2006.) recommends regulatory reform has the advantage of offering new and improved financial services to customers, increase competition, help banks to expand markets according to their capabilities.

Table: 2.1 List of private commercial banks

in million

Bank Name	Year of Establishment	Capital Owned as of June 2014	Percentage share of Capital	No of Branches as of June 2014
Awash International Bank	1994	1,979.30	13.54	152
Dashen Bank	1995	1,994.10	13.64	142
Abyssinia Bank	1996	1,326.00	9.07	109
Wegagen Bank	1997	1,825.80	12.49	100
United Bank	1998	1,334.40	9.13	99
Nib International Bank	1999	1,731.30	11.85	94
Cooperative Bank of Oromiya	2004	739.90	5.06	105
Lion International Bank	2006	514.30	3.52	62
Oromiya International Bank	2008	594.30	4.07	109
Zemen Bank	2008	529.10	3.62	9
Buna International Bank	2009	446.60	3.06	63
Berhan International Bank	2009	488.70	3.34	48
Abay Bank	2010	395.00	2.70	70
Addis International Bank	2011	277.90	1.90	21
Debub Global Bank	2012	177.30	1.21	19
Enat Bank	2012	261.60	1.79	3
Total		14,615.60	100.00	1,205.00

Source NBE annual report 2013/14

2.3 Empirical Literature Review

Studies on the determinants of bank performance follow the same measurement style in evaluating the performance of banks. Generally the internal factors which was the bank specific and the external factor which was the macro economic factors were used by researchers. In most of the studies variable such as capital adequacy, asset quality, liquidity,

and Management efficiency were the variables which were considered the internal factors basically under the control of the management. A macro-economic variable, which was called external factors, GDP and inflation were used to evaluate the determinants of profitability of commercial banks.

Sufian (2008) examined the determinants of Philippines banks profitability during the period 1990–2005. The empirical findings suggest that all the bank-specific determinant variables had a statistically significantly impact on bank profitability. The findings suggest that size, credit risk, and expense preference behavior were negatively related to banks' profitability, while non-interest income and capitalization had a positive impact. During the period under study, the result suggested that inflation had a negative impact on bank profitability.

Ongore(2013) findings of the Study showed that bank specific factors significantly affect the performance of commercial banks in Kenya, except for liquidity variable. But the overall effect of macroeconomic variables was inconclusive. Thus, it can be concluded that the financial performance of commercial banks in Kenya was driven mainly by board and management decisions, while macroeconomic factors had insignificant contribution.

Alper,and Anbar (2010) analyzed performance of domestic and foreign commercial banks over the period of 2000-2011, in this study it was found that, management efficiency; asset quality; interest income; capital adequacy and inflation were factors which affect the performance of domestic commercial banks in Uganda.

Oino(2015) the empirical study analyzed banks in sub-Saharan Africa for the period from 2000 to 2012 explored what determined banks profitability. Internal and external factors were influential in determining the profitability of banks. Specifically, the cost–income ratio and capital ratio negatively and significantly influence profitability.

Rao(2012) the study was carried out to explore the key determinants of profitability of commercial banks operating in Ethiopia over the period 1999/00-2008/09. The internal factors considered were related to the bank's capital structure, liquidity, credit risk, loan portfolio, asset quality, and expense management aspects whereas the external factors was related to the industry and the macroeconomic scenarios within which the banks operate. The result of the

study indicated that the most determinants of bank profitability in Ethiopia were the internal factors, factors over which a bank's management had control. Nevertheless the external factors were found to be statistically insignificant, and because it require the attention of policy makers and bank regulators.

Alper and Anbar (2010) the aim of the study was to examine the bank-specific and macroeconomic determinants of banks profitability in Turkey over the time period from 2002 to 2010. The bank's profitability is measured by return on assets (ROA) and return on equity (ROE) as a function of bank-specific and macroeconomic determinants. The result showed that asset size and non-interest income have a positive and significant effect on bank profitability. However, size of credit portfolio and loans under follow-up had a negative and significant impact on bank profitability. But a macro-economic variable real interest rate affects the performance of banks positively.

Farouk (2015) this research investigated the impact of investment in Information Technology (IT) on the financial performance of banks in Nigeria from2006-2010 for a period of five years. Investment in IT, total earnings and total cost were used as the independent variables while financial performance is the dependent variable, represented by return on assets (ROA), return on equity (ROE), net profit margin (NPM) and earnings per share (EPS). The result revealed that there was a significant relationship between the independent variables and the dependent variables, but the test revealed that the impact of IT investment on the financial performance of Nigeria banks were significant on all the financial performance variables, negative for ROA, ROE and EPS but not significant for NPM. This implies an increase on IT spending leads to a decrease in the financial performance of Nigerian banks, i.e. IT investment does not increase banks profitability.

Agbolade (2011) examined iinformation and communication technology and banks profitability in Nigeria and the nature of the relationship that exists between banks Profitability and the adoption of Information and Communication Technology. The data analysis showed that a positive correlation exists between ICT and banks profitability in Nigeria. This implies that a marginal change in the level of the investment and adoption of ICT in the banking industry will result to a proportionate increase in the profit level.

The study assessed the impact of ICT on the performance of South African banking industry over the period 1990-2012. The findings of the study indicated that the use of ICT increased return on capital employed as well as return on assets of the South African banking industry. Binuyo (2014)the study discovers that more of the contribution to performance comes from information and communication technology cost efficiency. The study also added that banks should emphasize policies that enhanced proper utilization of existing ICT equipment rather than additional investments.

Cekrezi (2015) Capital adequacy is one of the bank specific factors that influence the level of bank profitability. Capital adequacy ratio demonstrates the internal strength of the bank to support losses during crisis periods. According to results capital adequacy had a negative impact on performance of commercial banks in Albania, which was statistically significant. The result suggests that a higher capital ratio leads to lower profitability. Liquidity is negatively related with profitability, it brings the reduction of profitability (increase in the amount of loans). This happens because the Albanian banks have experienced big amount of loss from increasing rate of non-performing loans. The study added that bank size has a negative but statistically insignificant effect on banks.

Ojo (2012) examined the effect of marketing strategies on banks performance in the Nigeria. The findings in this study showed an overall significance of the marketing variables adopted, the models formulated showed that the explanatory variables reasonably explained the behavior of the explained variables; The researcher added that banks should embark from time to time on marketing research and should compare the different marketing techniques to access the success and the failure of such strategies in the industry. Apart from these, banks are also encouraged to be more customers-focused and embrace relationship marketing rather than transaction marketing as well as embark on effective management of depositors' funds.

Adeleke (2015)explored the effect of service marketing mix and bank performance in Nigeria using twenty one consolidated banks in Nigeria. The findings of the study showed an overall significance of the service marketing variables adopted, the model formulated showed that the explanatory variables reasonably explained the behavior of the explained variables; and

concluded that there was a significant positive relationship between service marketing mix and asset performance of the Nigerian banks.

Sheefeni(2015)in this study examined the macroeconomic determinants of commercial bank's profitability in Namibia covering the period 2001 to 2014 was explored. According to the study the results reveal that the variables gross domestic product, inflation rate and interest rate do not significantly influence commercial bank's profitability in Namibia. In this outcome the macroeconomic environment does not play a role in influencing the profitability of the commercial banks.

Ebrati and Safari (2013) empirically investigate the impact of capital structure on firm performance. Using accounting-based measures of financial performance return on equity (ROE), return on assets (ROA), in Tehran Stock Exchange from 2006 to 2011. The results indicate that firm performance, which is measured by ROE, was significantly and positively associated with capital structure, while a negative relation between capital structure and Return on Asset and Earnings per share (ROA, EPS). Therefore the study evidenced that firm performance were positively or even negatively related to capital structure.

Zahid(2015) the study investigated the capital adequacy behavior of banking industry of Pakistan over the period 2004 to 2009, under numerous regulatory stresses particularly when there is contemporary global crisis developing around the world. The emphasis in the study was to explore exactly how institutions react to the regulatory capital requirement changes. The research found out a positive and statistically significant association between return on assets and capital ratio. This relates to the fact that in order to up turn capital, banks depends more on retained earnings. Another important finding of the study was that the features of banks served as significantly important factors for a bank response to the changing capital requirement such as size, had a statistically significant and a negative effect on capital, which means that bigger banks are less inclined towards increasing capital as compare to small banks. A likely elucidation for this can be that big banks have easy and better access to the bond market. The relation between risk weighted capital ratio and regulatory pressure is positive and significant, as it implies that banks under regulatory pressure will prefer into less

risky ventures. This in turn reduces the chances of bank failure and failure of speculative activities thus reducing the social and economic costs arising from such failures.

Harimaya (n/d) according to the study made to investigates the effects of branch expansion on cost and profit efficiency for the Japanese regional banks over the period of fiscal year 1999-2009. But the results indicate that excessive branch expansion relates to lower profit efficiency, but the study recommends an adequate levels of branch expansion have positive impacts on both cost and profit efficiencies for regional banks through diversifying banks' portfolio.

Carlson (2005) examining the effects of branching at the aggregate level generally supports the hypothesis that allowing branch banking increases systemic stability. Wheelock (1995) Studies why banks disappear, concludes that banks where branching is permitted had a lower probability of failing and enhanced freedoms to branch would afford banks greater diversification and thereby reduce their vulnerability to localized economic shocks.

Genchev (2012) the study was an attempt to explore the effect of market share on banks profitability on Bulgarians banks over the period 2006 to 2010. For the measurement of bank profitability using one of the most widely used indicators: return on equity (ROE) the survey results show that the relationship between market share and profitability of banks is positive and statistically significant confirms that market share is positively associated with return of equity. Adding in the findings of this study market share had several managerial advantages. It can enlarge their market share to improve profitability.

Following the footsteps of the previous studies as a background, this study focuses on the essential factors such as the effect of management efficiency and the capital management which are called the internal factor and the macro-economic i.e. disaggregated by its component classified as external factor, which have had an impact on the performance of private commercial banks in Ethiopia over the period 2005/2006-2013/2014.

2.4 Conceptual Framework

Dependent and Independent variables

The dependent variable which is explained by the explanatory variables was return on equity, return on assets and net interest Margin. The determinants of financial performance of commercial banks were internal or bank specific factor which are advertising expense, branch net-work, cost of capital, employee productivity, investment on technology. The external factor which was measured using macro-economic variables named as export and import. Industry factors another external variable which was measured by market share. The relationship between dependent and independent variable were explained by the following diagram:

Figure 2:1: Conceptual Frame Work

Bank Specific factor (Dependent Variable)

Macro- economic factor

Advertising

Branch net- work

Cost of Capital

Employee profitability

Investment on Technology

ROA

ROE

NIM

Export

Import

Industry factor

Market Share
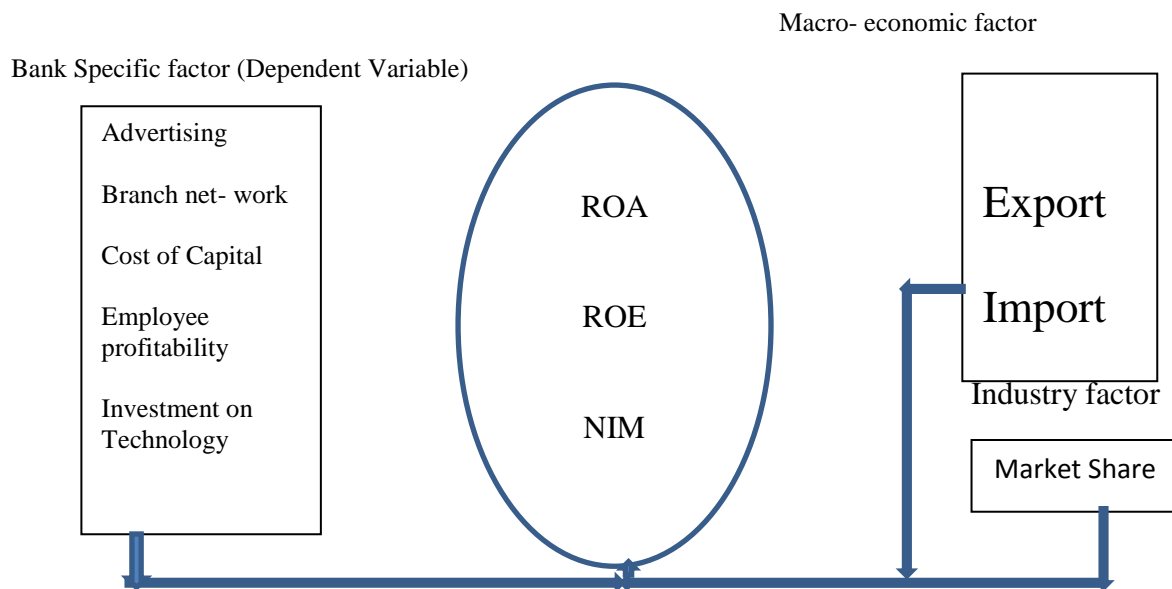
Source: Developed from literature review

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Design

The study follows quantitative research methods and adopts the diagnostic research design. Diagnostic research tries to determine the association of the subject matter with something else. This design enables researchers to identify the relationship that exists between the independent variable(s) and the dependent variable by examining the available data. It is also called explanatory research as it focuses on studying a situation or a problem in order to explain the relationships between variables Kothari (2004) Saunders (2009).

3.2 Sampling Technique and Sampling Design

Presently there are seventeen commercial banks in Ethiopia. The target populations under study were sixteen private commercial banks in the Ethiopian banking sector. The study was based on data obtained from selected private commercial banks which covers from 2006 to 2014 fiscal years .The sample of twelve commercial banks were selected based on their age. As a result of this, Abyssinia Bank, Awash Bank, Dashen Bank, Nib Bank, United Bank, Zemen Bank, Oromiya International Bank, Co-operative Bank of Oromiya, Berhan International Bank, Buna Bank, Lion Bank and Wegagen Bank are selected taking in to consideration the fact that some were served for long years and some are very young four banks were purposefully included but the rest are excluded because they served less than five years.

3.3 Sources of Data

The study used published audited annual financial statement of private commercial banks for bank specific (internal) and industry specific factors. Data regarding the macroeconomic variables were obtained from the annual bulletins of the National Bank of Ethiopia.

3.4 Method of Analysis

To meet the objectives of the study, both descriptive, correlation and econometric analysis were employed. The collected data were analyzed using excel and statistical package for social sciences (SPSS) Version 20.0.

3.4.1. Descriptive Analysis

The descriptive statistics in terms of maximum, minimum mean and standard deviation of the dependent, independent variables shall be worked out and presented in a table.

3.4.2 Correlation Analysis

In addition to the descriptive statistics, Pearson Correlation Coefficient has been determined to measure the degree to which the dependent and independent variables are associated.

3.4.3. Econometric Analysis

The econometric analysis was employed to assess the impact of bank specific, macro-economic and industry specific variables on Ethiopian private commercial banks 'profitability.

Model Specification

The major dependent variable performance indicators used were Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM.). The determinants (independent variables) were bank specific factors, macro-economic factors and industry specific factors.

- Investment on technology, Employee productivity, Cost of capital, advertisement, branch network
- export, import
- Market share

Multiple Linear Regression Analysis

To determine both the exogenous and endogenous variables which are affecting profitability of private commercial banks in Ethiopia, multiple linear regression analysis was employed.

The general linear regression model used in the study has been described below

$$Y_{it} = c + \sum \beta_k X^k_{it} + \varepsilon_{it} \text{------------------------------------ (1)}$$

Where Y_{it} = is the profitability of bank i at time t, with $i = 1,...,N$; $t = 1,..., T$, c *is* a constant term, $X_{it}, k,$ = explanatory variables and

ε_{it} =is the disturbance term.

The explanatory variables $\times_{it}$ are grouped, according to the discussion above, into bank-specific, macroeconomic variables and industry-specific. The general specification of model (1) with the X_{it}S separated into these three groups:

$$Y_{it} = c + \sum \beta_B X^B_{it} + \sum \beta_M X^M_{it} + \sum \beta_I X^I_{it} + \varepsilon_{it} \text{---------------- (2)}$$

Where the x_{it} with subscripts,

      B: Banks specific   M: Macro-economic specific I: Industry specific

MODEL 1

Thegeneralmodel is designed to see if the factors that are internal and external can affect the private banks profitability.

  Y = f (advertisement expense, branch network, cost of capital, employee productivity, invest. On technology, government expenditure, export, import, market share). This can be represented by:

$$Y_{it} = c_i + \beta_1 ADV_{it} + \beta_2 BRN_{it} + \beta_3 COC_{it} + \beta_4 EP_{it} + \beta_5 INT_{it} + \beta_6 EXP_{it} + \beta_7 IMP_{it} + \beta_8 MS_{it} + \varepsilon_i \text{--- (3)}$$

MODEL 2:

This model was designed to see if those factors that were categorized as internal and external can affect the private banks profitability. Which were designed for each dependent variable ROA, ROE and NIM.

1. $ROA_{it} = c_i + \beta_1 ADV_{it} + \beta_2 BRN_{it} + \beta_3 COC_{it} + \beta_4 EP_{it} + \beta_5 INT_{it} + \beta_6 EXP_{it} + \beta_7 IMP_{it} + \beta_8 MS_{it} + \varepsilon_{it}$ --(4)

2. $ROE_{it} = c_i + \beta_1 ADV_{it} + \beta_2 BRN_{it} + \beta_3 COC_{it} + \beta_4 EP_{it} + \beta_5 INT_{it} + \beta_6 EXP_{it} + \beta IMP_{it} + \beta_8 MS_{it} + \varepsilon_{it}$ ---(5)

3. $NIM_{it} = c_i + \beta_1 ADV_{it} + \beta_2 BRN_{it} + \beta_3 COC_{it} + \beta_4 EP_{it} + \beta_5 INT_{it} + \beta_6 EXP_{it} + \beta 7IMP_{it} + \beta_8 MS_{it} + \varepsilon_{it}$ --(6)

Where:

$t = 2002\text{-}2014$, c_i = constant for each bank, β= factors coefficients

ROA_{it} returns on Asset of bank i at time t

ROE_{it} returns on equity of bank i at time t

NIM_{it} net interest margin of bank i at time t

ADV_{it} advertisement expense of bank i at time t

BRN_{it} branch network of bank i at time t

EP_{it} employee productivity of bank i at time t

INT_{it} Investment on technology of bank i at time t

COC_{it} Cost of Capital of bank i at time t

EXP_{it} export at time t

IMP_{it} import at time t

MS_{it} market share of bank i at time t

3.4.4 Dependent variables

The dependent variables of the study are bank profitability indicators which is commonly measured by return on asset (ROA) , return on equity (ROE) and net interest margin (NIM).

Variables	Dependent Variable
ROA	The ratio of Net profit to Total Asset at time t
ROE	The ratio of Net profit to total Equity at time t
NIM	The ratio of Interest income less interest expense to total Asset

3.4.5 Independent Variables

Banks' profitability can be affected by a number of factors among those the research focused on the following variables

Internal (Bank Specific) Variable			Expected Out come
Advertising	The ratio of net profit before tax to Advertising expense of bank, i at time, t	ADV	+
Branch network	The total branches of bank, i at time, t	BRN	+
Cost of capital	The weighted average cost of bank , i at time, t	COC	+
employee productivity	The ratio of total income to salary and benefit expense of bank i at time, t	EP	+
investment on technology	The ratio of investment on technology to total depositfor bank i at time t	INT	+

External (Macroeconomic) Variable			
Export	Annual export in terms of GDP (%), at time t	EXP	+
Import	Annual import in terms of GDP (%) at time t	IMP	+

External (Industry) specific variable			
Market Share	The ratio of total asset of bank i to total asset of banks at time t	MS	+

CHAPTER FOUR

DATA ANALYSIS & DISCUSSIONS

This chapter deals with the results of the study which include descriptive statistics of variables, correlation results for dependent and explanatory variables ,diagnosis test for the regression models and regression analysis for three profitability measures return on assets net interest margin, and return on equity.

4.1 Descriptive Statistics

In this section descriptive analysis of the dependent variables, Return on Asset, Return on Equity and Net Interest Margin and explanatory variables involved in the analysis are presented in table 4.1.

In table 4.1 below shows the descriptive statistics for all variables. The average value of ROE is 22.4percentand maximum return of 49.41percentfor the most profitable bank. The high standard deviation is the result of difference in capital employed. Whereas the negative value implies that banks which are mainly in the startup stage.

Table 4.1 Descriptive Statistics for Dependent and Independent variable

Descriptive Statistics-Dependent and Independent Variable				
	N	Minimum	Maximum	Mean	Std. Deviation
ROE	92	-11.2	49.41	22.4	12.68
NIM	92	0.4	4.4	2.9	0.9
ROA	92	0.0	7.5	3.6	1.6
ADV	92	0.000	3.145	0.69	0.51
BRN	92	1.00	150.00	46.63	30.66
COC	92	0.00	7.50	3.98	1.77
EP	92	0.08	5.19	1.83	0.89
ICT	92	0.00	2.094	0.33	0.39
EXP	92	10.61	16.69	13.13	1.75
IMP	92	29.00	36.90	31.36	2.18
MKS	92	0.73	31.81	9.78	7.29

Source: *SPSS Output from Financial Statements of Sample Banks, 2006 -2014 & Reports of NBE*

While NIM had an average2.9%with the standard deviation of 0.9this shows that banks use constant and related interest rate on lending as well as on paying interest to the customer. According to Zerayehu S. E. (2013)banks to avoid risk follow the same pattern of interest. On other hand it is the result of interest rate for depositors are paid same, because it is set by the NBE. ROA average is 3.6percentwith a standard deviation of 1.6 shows there is low variability in their return on asset. This implies, the average profitable bank earned 3.6 percent of profit before tax for each birr invested in the assets of the firm. But the most profitable bank earned 7.5percent of profit before tax for a single birr invested in the assets of the firm. According to Habtamu (2011) study on the determinants for financial performance of Ethiopian private banks from 2002-2011 the average ROE of Ethiopian private banks was 21.31 percent and ROA 2.39 percent and NIM were 4.85 percent. Whereas, Zerayehu S. E.(2013) in his 2008 study NIM was 2.7% showing an increase on the recent years.

On the other hand table 4.1 shows the independent variable statistical analysis of determinants of financial performance of private commercial banks in Ethiopia. The table shows minimum, maximum, mean, and standard deviation. The maximum values of advertisement were 3.145% and the minimum value was zero, with an average of 0.69% over the entire period. It indicates that advertisement contributes an average of 0.69 percent of banks profitability.

Employee productivity has maximum of 5.19 and a minimum of 0.08 with an average of 1.83 and standard deviation of 0.89. It implies that banks gain an average return of 1.83 percent per employee for each birr of salary paid. The study indicates that effective utilization of manpower in the private commercial banks of Ethiopia

Investment on technology has the mean value of 0.33 percent and a standard deviation of 0.39. The minimum and the maximum are zero and 2.094 percent respectively. IT implies that for each birr deposit collected the bank has invested on technology an average of 0.33percent. This study indicates that in this area of investment private commercial banks are expected to increase the utilization of resources and the opportunities of the technological advantage.

To maintain the position of the bank branch expansion is one of the strategies for banks. The maximum of branch net- work is 150 whereas the minimum is one, with an average of 47 branches and standard deviation of 31. The highest deviation as compared to the other variable is the big difference among banks in opening branches. The higher deviation is the result of the new incoming private commercial banks and Zemen Bank is a one branch bank

On the other hand cost of capital had a maximum of 7.5percent and the minimum zero, with an average of 3.98 percent and standard deviation of 1.77. It implies that banks pay an average of 3.98percent per year to mobilize capital. This study shows that low standard deviation indicates that to mobilize capital banks pay with a small variation. According to Rao (2012), this is because of banks oligopolistic nature and a result of low competition,

The other independent variables shown in Table 4.1 are macro-economic variables export and import. Export has the maximum value of16.69and the minimum value of 10.61 percent with an average of 13.13,and standard deviation of 1.75 with low variability. Import has a maximum value 36.9 and minimum value 29 with an average of 31.36 and standard deviation of 2.18 having low variability. It implies import and export growth rate have a very important effect. Because the economy is highly dependent on imported goods, on the other hand effort are underway to maximize export items at national level, Therefore these has a direct implication on the profitability of private commercial banks.

Market share of the industry shows the maximum of 31.81percent and a minimum of 0.73 percent having an industry average of 9.78 percent over the period under study and a standard deviation of 7.29. The standard deviation 7.29 is the third highest value among the variables. The result shows that private banks in Ethiopia have a variation in sharing the market. The reason is that some are established recently and the other has a long age. In addition to that the difference in resource employed by each bank has a role for the variability. The private commercial banks that operate above the average had a high profit where as those who are below the average score a lowest profit.

4.2 Diagnosis Test

As indicated in the table 4.2 R-square explains how much of the variance in the dependent variable is explained by the independent variable. Return on asset and return on equity is explained 76 % and net interest margin is explained 69 % by the independent variable.

Table 4.2 Model Summary

Dependent Variable	R Square	Adjusted R Square
Return on Asset	.76	.73
Return on Equity	.76	.74
Net interest Margin	.69	.64

Source: *SPSS Output from Financial Statements of Sample Banks, 2006 -2014 & Reports of NBE*

4.2.1 Muliticollinearity

The existence of strong correlation between the independent variables was tested using Variance Inflation Factor (VIF) and presented on table 4.4, VIF value above 10 would be considered as indicating multicollinearity.

4.2.2 Correlation

The correlation between the variable in the model are provided in the table 4.2,the degree of correlation between bank specific factors, macro- economic factors and market share as expressed by ROA, ROE and NIM or the degree of relationship between the explanatory and explained variables explained by the parameter coefficients. The coefficients shows the magnitude and direction of the relationships, whether it is strong, weak positive or negative. The higher the values the stronger the relationship, and the smaller the coefficient is an indicator of a weak relationship. The sign also shows the direction of the relationship. The positive sign shows a positive relationship and the negative shows the negative relationship.

A correlation matrix is used to ensure the correlation between explanatory variables. That is a correlation coefficient above 0.8 between explanatory variables should be corrected because it is a sign of multi-collinearity problem (Brooks 2008).

Table 4.4. Correlation Coefficient between Variables

	ROE	NIM	ROA	ADV	BRN	COC	SQU	ICT	EXP	IMP	MKS
ROE	1.000										
NIM	.262	1.000									
ROA	.821	.312	1.000								
ADV	.579	.216	.635	1.000							
BRN	.421	.440	.321	.415	1.000						
COC	.615	.221	.769	.508	.206	1.000					
EP	.491	.243	.562	.174	.265	.489	1.000				
ICT	-.402	-.313	-.448	-.353	-.179	-.393	-.237	1.000			
EXP	.220	-.298	.235	.198	-.184	.238	-.064	-.015	1.000		
IMP	.100	-.084	-.004	.013	-.387	-.045	-.369	.091	.481	1.000	
MKS	.660	.310	.386	.467	.432	.271	.126	-.299	-.073	.149	1.000

Source: *SPSS Output from Financial Statements of Sample Banks, 2006 -2014 & Reports of NBE*

Table 4.4 shows the relationship between the dependent and independent variables. As can be seen from the table **an advertisement is** positively related to ROE, ROA and NIM. This relationship may indicate that banks earnings have a direct relationship with advertisement. This is because that increase in advertisement encourages customers to deposit and utilize banks products and services. Branch network positively related to all the three bank performance indicators. This indicates that expansion of branch net- work up to the optimum has a direct impact on bank performance.

The positive correlation coefficient between cost of capital return on asset and return on equity is very strong. This is due to the fact that deposit and capital constitutes the largest shares that contribute to the generation of return for the shareholders. The other explanatory variable, labour efficiency is positively related to all the three performance ratios and more strongly related to ROE. This implies that improved labor productivity results increase in income. Investment on communication technology is also negatively related to ROA, ROE and NIM.

This may be due to the fact that a marginal increase in investment on information technology results a decrease in the performance of banks. The type of relationship between macro variables of export and import and bank performance is mixed. Export and import has a positive correlation with ROE.. Whereas export and import has a negative relationship with net interest margin. However export has a positive relationship with ROA but import has a negative relationship. Market share has a direct and positively related to ROA, NIM and ROE. This implies the increase in market share results increase in performance of Ethiopian private commercial banks.

4.3 Determinants of Financial Performance of Commercial Banks Profitability

The determinants of the financial performance of private commercial banks measured by ROA, ROE and NIM were evaluated using the regression analysis.

4.3.1 Regression Analysis between Return on Asset and Explanatory Variables

To examine the relationship between profitability measures and explanatory variables regression analysis were employed and the results are presented in table 4.4.

Table 4.4 Regression analysis result between ROA and explanatory variables

	Coefficients				
Model	B	Std. Error	t	Sig.	VIF
(Constant)	-3.202	1.599	-2.003	.048	
ADV	.873	.222	3.934	.000	1.870
BRN	.003	.004	.903	.369	1.812
COC	.346	.066	5.262	.000	1.948
EP	.570	.118	4.828	.000	1.602
ICT	-.420	.241	-1.742	.085	1.286
EXP	.046	.061	.755	.452	1.621
IMP	.098	.056	1.760	.082	2.114
MKS	.006	.015	.370	.712	1.838

Advertising expense: As hypothesized by the researcher, advertising expense is significantly and positively related to financial performance of private commercial banks in Ethiopia measured by ROA at 1percent significance level. The positive relationship implies that as the commercial banks increase advertisement activities of their services and financial products to potential customers and to the public profitability of private commercial banks will increase. Which means that a unit increases in advertising expenditure will increase the average ROA of commercial Banks by 0.873 factors. The result is also consistent with Ojo (2012) who has found similar finding in the Nigeria Banking sector. Therefore, it can be concluded that addressing how advertising services are delivered towards meeting the needs of the customer increase banks' profitability. Therefore banks that have a better advertising capacity are able to attract more customers and better fund mobilization which lead to their increased profitability.

Employees' Productivity: Employees' Productivity measured by the ratio of total revenue to total number of employee was also hypothesized to positively affect the profitability of private commercial banks measured by ROA. The result showed that as expected, it was found to significantly and positively affect the financial performance of private commercial banks at 1 percent level of significance. It shows that banks can increase their profits from improved labour productivity and with a better pay. The result is consistent with the findings of Athanasoglou(2005) who has found a postive impact of labor productivity on the Greak Commerial Banks.This result also implies that the better banks pay the better employee profitablity and compettion among banks.Therefore better payto employee leads to improved profitablity of private commercial banks in Ethiopia.

Investment on information technology (ICT) on ROA measured on the ratio of investment on ICT to total deposit affect the financial performance of the private commercial banks significantly and negatively at 10% level of significance. This is unexpected result due to the fact that technology expected to reduce effort and increase productivity which may in turn increase profitability. But the findings surprisingly indicate that higher IT investments are negatively associated with profitability. Thus, a marginal change in investment of ICT will decrease ROA of private commercial banks. However the unexpected result is due to the fact

that capacity of proper and efficient utilization of modern banking technologies is not yet well developed within the private commercial banks. As a result, banks are not fully utilized the available technology to bring the desired improvement of their financial performance. In addition to that although banks invest heavily in technology, the level of exploiting the technology is very low. As a result the study failed to accept the hypothesis that investment on technology had a positive effect on the financial performance of Ethiopian private commercial. The study is consistent with the findings of Farouk (2015) which concluded that the impact of ICT on banks performance is negative on the profit side as measured by ROA.

Cost of Capital: The other important bank specific factor that determines the performance of private commercial banks was represented by the weighted average cost of capital. It significantly and positively affects the performance of commercial banks at a 1percent level of significance. It implies that whenever banks demand capital they have to pay interest for the deposit and dividend for the capital they collected. The higher the profitable the higher dividend and interest paid for the capital and deposit mobilized. The outcomes were in agreement with the hypothesis that cost of capital had a positive effect on the financial performance of Ethiopian private commercial banks. The results were consistent with King (2009) which had a direct implication of a more profitable bank face a higher cost of capital. Since increased capitalization leads to higher profit expectation by finance providers which is finally reflected on increased return on assets. Therefore company's has to pay more for their finance providers to encourage and to hold financial security that will increase profitability.

As presented in the table 4.4 the relationships of components of macroeconomic variables with bank performance were analyzed. However, only import is significant and positively related to ROA at 10 percent level of significance. This positive relationship indicates that the size of import has a significant positive impact on profitability of private commercial banks. Given the economy of the country which is highly dependent on imported goods the level of impact may increase on the performance of private commercial banks. According to the hypothesis import had a positive relation with profitability. Eventhough there is no study found on the disaggregated impact of macro variables most researchers concluded based on the

GDP variable that GDP has no impact on the profitablity Rao (2012), Ongore (2013) and Sufian (2008).

4.3.2 Regression Analysis between Return on Equity and Explanatory Variables

The second regression analysis was done to examine how much banks earning on their equity investment is affected, an amount that is measured by the return on equity in relation with explanatory variables. To examine the relationship between profitability measures and explanatory variables regression analysis were employed and the results are presented in table 4.5.

Branch net-work: as hypothesized by the researcher, branch net work is postively related to the financial performance of private commercial banks in Ethiopia measured by ROE at a 10 percent significance level. The postive relationship implies that the increament on the number of branches have significant postive impact on the profitablity of private commercial banks. The result is consistent withHarimaya (n/d) the effects of branch expansion on cost and profit efficiency indicate that excessive branch expansion relates to lower profit efficiency but it recommends adequate level of branch expansion had a positive impact. Therfore the significance and positive impact shows that banks need to expand until they reached the marginal productivity of additional branches reaches to a minimum.

Table 4.5Regression analysis result between ROE and explanatory variable

Model	Unstandardized Coefficients		T	Sig.	VIF
	B	Std. Error			
(Constant)	-46.032	13.010	-3.538	.001	
ADV	2.714	1.806	1.503	.137	1.870
BRN	.058	.030	1.958	.054	1.812
COC	1.397	.535	2.611	.011	1.948
EP	4.789	.961	4.986	.000	1.602
ICT	-2.193	1.961	-1.118	.267	1.286
EXP	1.116	.494	2.259	.027	1.621
IMP	.907	.452	2.005	.048	2.114
MKS	.731	.126	5.804	.000	1.838

Source: *SPSS Output from Financial Statements of Sample Banks, 2006 -2014 & Reports of NBE*

Employee productivity: As hypothesized by the researcher employee productivity is significantly and positively related to the financial performance of private commercial banks in Ethiopia measured by ROE at 1percentlevel of significance. The result is also consistent with the findings Eichengreen and Gibson (2001) cited by Athanasoglou (2005) state that the effect of staff expenses is positive and significant. Since increasing profits from improved employee productivity is the result of higher quality of hired labour with a better pay. This result also implies that the better banks pay the better employee profitablity and compettion among banks. Therfore better pay to employee leads to improved profitablity of private commercial banks in Ethiopia.

Cost of capital: As hypothesized by the researcher that cost of capital is significantly and positively related to the financial performance of private commercial banks in Ethiopia measured by ROE at a 5 percent level of significance. This positive relationship shows that

whenever banks demand capital and deposit they have to pay interest and dividend and this has a significant positive impact on profitability of Ethiopian private commercial banks. The higher the profitable the higher dividend and interest paid for the capital and deposit mobilized. The results were consistent with King (2009) which had a direct implication of a more profitable bank face a higher cost of capital. Since increased capitalization leads to higher profit expectation by finance providers which is finally reflected on increased return on equity. Therefore company's has to pay more for their finance providers to encourage and to hold financial security that will increase profitability.

As presented in the table 4.5the relationships of components of macroeconomic variables with bank performance were analyzed. As hypothesized by the researcher export is positively related to the financial performance of private commercial banks in Ethiopia measured by ROE at 5% level of significance. This positive relationship indicates that the size of export have a significant positive impact on profitability of private commercial banks which is related with the exchange rate effect. Given the economy of the country which is highly occupied to increase goods exported the level of export has a direct impact and increase the performance of Ethiopian private commercial banks. Eventhough not able to find a study on the disagregated impact of macro variables most researchers concluded based on the GDP variable that GDP has no impact on the profitablity banks Rao (2012), Ongore (2013) and Sufian (2008).

Import: Table 4.5 shows that, import is highly significant and positively related to ROE at 5% level of significance. This positive relationship implies that the size of import have a significant positive impact on profitability of Ethiopian private commercial banks which is related with the exchange rate effect. Given the economy of the country which is highly dependent on imported goods the level of import may increase the performance of private commercial banks. The out come is in confirmity with the hypothesis import is positivelyrelated to the financial performance of Ethiopian private commercial banks. Eventhough not able to find a study on the disagregated impact of macro variables most researchers concluded based on the GDP variable that GDP has no impact on the profitablity banks Rao (2012), Ongore (2013) and Sufian (2008).

Market share: Table 4.5shows that the effect of market share on the performance of private commercial banks measured by ROE is significantly and positively related at a 1% level of significance. The impact of positive relationship shows that as the unit increase in the market share it has a significant and positive impact on the profitability of Ethiopian private commercial banks. The result supports the hypothesis that market share has a positive effect on the performance of Ethiopian private commercial banks. The result is in conformity with the findings of Genchev (2012) which states that market share is positively associated with return on equity. Therefore the findings of this study confirm that the pursuit of market share is indeed a correct strategy for the banks. According to Athanasoglou (2005) managerial efficiency not only raises profits, but may lead to market share gains.

4.3.3   Regression Analysis between Net Interest Margin and Explanatory Variables

The other measure of bank profitability is net interest margin, the difference between interest income and interest expense as a percentage of total assets to reflect the extent to which a banks earning asset is profitable. To examine the relationship between profitability measures and explanatory variables regression analysis were employed and the results are presented in table 4.6.

Branch net-work:as hypothesized by the researcher, branch net work is significantly and postively related to financial performance of private commercial banks in Ethiopia measured by net interest margin at 1 percent level of significance. The postive relationship implies thatthe increase on the size and number of branches have significant postive impact on the profitablity of private commercial banks. The result is consistent with wheelock (1995) and Harimaya (n/d) the effects of branch expansion on cost and profit efficiency, larger networks attracting more customerbases and deposits and a reduction in costs through economies of scale. Therfore the significance and positive impact shows that banks need to expand until they reached the marginal productivity of additional branches reaches to a minimum.

Investment on information technology (ICT) on NIM is significantly and negatively related to at 5percent level of significance. Moreover the significant negative relationship between the

ICT and NIM indicates that higher IT investments are associated with lower profitability. This is unexpected result due to the fact that technology is expected to reduce efforts and increase productivity which may increase profitability. This shows that although banks invest in technology the level of exploiting the ICT is very low. In addition to that the negative relationship implies that cost of investment in technology to mobilize deposits is high. As a result the study failed to accept the hypothesis that investment on technology had a positive effect on the financial performance of Ethiopian private commercial banks.

Table 4.6 Regression analysis result between NIM and explanatory variables

Model	Unstandardized Coefficients		T	Sig.	VIF
	B	Std. Error			
(Constant)	-.124	1.519	-.082	.935	
ADV	-.036	.211	-.171	.865	1.870
BRN	.014	.003	3.934	.000	1.812
COC	.064	.062	1.030	.306	1.948
EP	.145	.112	1.291	.200	1.602
ICT	-.530	.229	-2.314	.023	1.286
EXP	-.226	.058	-3.918	.000	1.621
IMP	.164	.053	3.109	.003	2.114
MKS	-.010	.015	-.709	.480	1.838

Source: *SPSS Output from Financial Statements of Sample Banks, 2006 -2014 & Reports of NBE*

As presented in the table 4.6the relationships of components of macroeconomic variables with bank performance were analyzed. **Export**: in contrary to the hypothesis by the researcher, itis significantly and negatively related to the financial performance of private commercial banks in Ethiopia measured by NIM at 1 percent significance level. This negative relationship implies that as the size of export increased by a unit it has a negative impact on profitability of private commercial banks. As a result the study failed to accept the hypothesis that export had a positive effect on the financial performance of Ethiopian private commercial banks. Eventhough not able to find a study on the disagregated impact of macro variables most

researchers concluded based on the GDP variable that GDP has no impact on the profitablity banks Rao (2012), Ongore (2013) and Sufian (2008).

Import: as table 4.6 shows that, as hypothesized by the researcher import is positively related to the financial performance of private commercial banks in Ethiopia measured by NIM at 1percentlevel of significance. This positive relationship implies that as the unit increase in the size of import the profitability of Ethiopian private commercial banks will also increase. Given the economy of the country which is highly dependent on imported goods the level of import may increase the performance of private commercial banks. Eventhough not able to find a study on the disagregated impact of macro variables most researchers concluded based on the GDP variable that GDP has no impact on the profitablity banks Rao (2012), Ongore (2013) and Sufian (2008).

Finally the over all objective of the study was to examine the effects of bank specific factors, macro economic factors and industry specific factors on the performance of Ethiopian private commercial banks. To achieve these objective nine years data from twelve banks was analayized using linear multiple regressionmodel. In this study the effect of determinant of the financial performance of Ethiopian private commercial banks as expressed by ROA,ROE andNIM was evaluated. It was found that bank specific factors,macro economic factor and industry specific factor affect strongly and significantly the financial performance of Ethiopian private commercial banks. To be able to see the effects the variable advertisment, employee productivity, and cost of capital strongly and significantly affect the ROA with a 99% confidence level. However both bank specific, macroeconomic and industry specific factor strongly and significantly affect ROE and NIM. For instance branch network and employee productivity from bank specific factor export and import from macro economic factor and marketshare from industry specific factor with a 99% confidence level affect the performance of of Ethiopian private commercial banks.

This study is not in agreement with the results of different researchers Sufian (2006), Rao (2010), Ameur (2013), Ongore (2013), Alper (2011), Athanasoglou (2005) that only bank specific fators affect significantly the performance of private commercial banks in Ethiopia.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusion

The rapid changes in the financial service industries have caught growing attentions of academic researchers and business managers on the competitiveness and factors that affect profitability in the banking industry. Taking in to consideration the current competition banks focus on strategic goals to maintain growth, competitiveness and profitability, it becomes important to search for the critical determinant of profitability. Therefore the main objective of the study was to examine the key factors that influence the profitability of private commercial banks in Ethiopia over the period 2006-2014. The variables are selected to show how among the major part of the expenses and how the cost of capital and how the macro economic variables and the industry factor (market share) from the external factor affect the performance of private commercial banks in Ethiopia.

Using the multiple regression models, five internal and three external factors were regressed against ROA, NIM and ROE. The study found that the internal factors, macro- economic factors and industry factor are the most determinant factors of bank performance of private commercial banks Ethiopia. However many of the researchers concluded that internal factor had a very significant effect on the performance of private commercial banks. On the other hand macro- economic factors expressed by GDP had no significant effect on the performance of private commercial banks. But in this study macro- economic components had a very significant effect as performance indicators of ROE and NIM, ROA.

During the period under study, the results suggested that bank specific factor advertisement, service quality, investment in information technology, cost of capital and branch network were evaluated. Based on the regression result the variables advertisement cost of capital and

employee productivity had a significant effect in the return on asset where as ICT had a negative effect which is unexpected result.

On the other hand with regard to ROE branch network cost of capital, employee productivity, has a significant and positive effect. Macro- economic factors export and import has also a significant and positive relationship. Industry factor market share also shows a significant and positive relationship with return on return on equity.

In relation to net interest margin branch net- work, from the banks specific factors and import from the macro economic factors has a significant and positive relationship. But investment on information technology and export has a significant and negative relationship with the net interest margin.

Therefore, it can be concluded that banks profitability in the Ethiopian banking sector is largely influenced by both the internal and external factors.

5.2 Recommendations

The strong relationship between performance measurements and internal and external factors shows that how well private commercial bank's management is managing its resources, whereas the negative relationship between investment in information communication technology with that of ROE, ROA and NIM shows a high degree of attention because of the huge investment made and the advantage of technology advancement in the Ethiopian banking sector. This is particularly important because private commercial banks with relatively more utilization of advanced technologies may have an added advantage over its competitors, besides increasing the exploitation of technologies will in courage banks to offer more new products and services. On the other hand the insignificant effect of investment on information technology on the return on equity is unexpected, however it is an indicator of how much private commercial banks underutilized the technology.

The other important factor which management to focus on is that the expansion of branch network. Taking in to consideration the number of people which is unbanked expanding and reaching and maximizing the customer base until the return from the branch expansion

reaches its minimum is a big advantage to the performance of private commercial banks. As the number of branches increases not only increases deposit also is an advantage to increase productivity through economies of scale and minimize risks through diversification, that will have a greater advantage to banks to utilize and maximize the return from the investment they made on technologies.

Many researchers evaluated the external factor based on GDP and reached a conclusion that it has no significant effect on the performance of commercial banks. Whereas evaluating on a disaggregated level shows that how important some variables are in evaluating the performance indicators. Based on the findings of the macro-economic variables the result shows a significance relation with that of ROA, ROE and net interest margin. Therefore, management should consider those out comes   and maximize the performance of private commercial banks through the effects of the external factor.

The continued success of the banking sector depends on its efficiency, profitability, and competitiveness. Furthermore, in view of the increasing competition among them attributed to the more open banking sector, bank managements as well as the policymakers will be more inclined to find ways to obtain the optimal utilization of capacities while making the best use of their resources, so that these resources are not wasted during the production of banking products and services. Avoiding inefficiencies will help banks not to pass part of increased costs to their customers because it will affect the competitiveness of the private commercial banking sector.

Moreover, the ability to maximize returns on investment and sustaining stable and competitive returns is an important element in ensuring the competitiveness of the private commercial banking sector. Thus, from a regulatory viewpoint, the regulation of private commercial banks should be based on the performance of the financial sector particularly on its efficiency and profitability. The policy direction of the management should be directed towards enhancing the flexibility and efficiency of ther banks both in the short and long run sustainability with the aim of intensifying the strength and stability of the financial sector. Thus, efficiency and effectiveness will matter for continuous growth and profitability. Finally banks should

concentrate in the long run effects of their short term decision rather than focusing on the yearly increment of profit maximization.

At last this study investigates the determinants of profitability of private commercial banks in Ethiopia. But in order to exhaustively look for the determinants of banks profitability future research could include in evaluating the performance of banks such as change in loan portfolio of private banks and the macro-economic sector of agriculture, industry and service on the profitability of banks. Another possible area of research could be evaluating the composition private commercial banks shareholders (owners) and its impact on the profitability of the private commercial banks. Finally this research could have some limitations therefore the limit may provide an opportunity for future research on the determinants of financial performance of private commercial banks.

References

Abubakar, A. (2015). Relationship Between Financial Leverage and Financial Performance of Deposit Money Banks in Nigeria. *International Journal of Economics, Commerce and Managment* , 759-778.

ACCA Student accountant Technical Article. (n.d.). *accaglobal*. Retrieved September 30, 2015, from accaglobal.com: http://www.accaglobal.com

Addison, T. a. (2002). *Ethiopia's New Financial Sector And Its Regulation.* Working Paper Series, Nairobi.

Adeleke, A. (2015). Post Consolidation Analysis of Service Marketing Mix and Bank Performance in Nigeria. *International Journal of Seintific and Engineering Research* , 476-484.

Adeneye, O. A. (2015). Post Consolidation Analysis of Service Marketing Mix and Bank Performance in Nigeria. *International Journal of Seintific and Engineering Research* , 476-484.

Admasu Bezabeh, A. D. (2014). Banking Sector Reform in Ethiopia. *International Journal of Business and Commerce* , 25-38.

Admasu, B. ,. (2014). Banking Sector Reform in Ethiopia. *International Journal of Business and Commerce* , 25-38.

African Economic Outlook. (2015). *African Economic Outlook.* AfDB, OECD, UNDP.

Aftab, N. ,. (2015). Historical Analysis of Bank Profitablity Using CAMEL Parameters Role of Ownership and Political Regimes in Pakistan. *International Journal of Economocs and Finance* , 144-155.

Agbolade, O. K. (2011). Information and Communication Technology And Banks Profitability In Nigeria. *Australian Journal of Business and Management Research* , 102-107.

Alemayehu, G. (no date). *The Structure and Performance of Ethiopias Financial sector:In the pre and post reform period with Special Focus in banking.* Draft.

Alper, D. a. (2011). Bank Specific and Macro Economic Determinants of Commercial Bank Profitablity: Emperical Evidence from Turkey. *Business and Economics Research Journal* , 139-152.

Antonio, M.(2015, July). StakeHolders Managment and Performance Measurement in Banks.

Retrived october 26,2015 from*http://www.researchgate.net/publication/280227347*

Antwi G. O., M. L. (2015). Determinants of Bank Performance in Ghana, the Economic
 Value Added (EVA) Approach. *International Journal of Economics and Finance;* ,
 203-215.

Athanasoglou, P. ,. (2005, June). Working Paper. *Bank Specific, Industry Specific and macro
 Economic determminans of Bank profitablity* , pp. 1-35.

Balachandher K Guru, J. S. (n.d.). *Determinants of Commercial Bank Profitablity in
 Malaysia*. Retrieved September 29, 2015, from http://web.usm.my/aamj/5.2.2000/5-2-
 1.pdf: http://web.usm

Balaputhiran, S. (2014). Firm performance and Earnings per share: A study of listed banks in
 Sri Lanka. *Merit Research Journal of Accounting, Auditing, Econometrics and
 Finance, 2(1)*, 8-11.

Beardshaw, J. B. (1998). *Economics, A student's Guide.* London: Pearson Education Asia Pte
 Ltd.

Berger, A. N. (2003). The Economic Effects of Technological Progress: Evidence from the
 Banking Industry. *Journal of Money,Credit, and Banking* , 1-42.

Bilkisu Karibu USman Farouk, P. (April 2015). Impact of Investment in Information
 Technology on Financial Performance of Nigerian Banks: Is there a Productivity
 Paradox. *Journal of Internet Banking and Commerce* , 1-22.

Binuyo, A. O. (2014). The Impact of Information and Communication Technology on
 Commercial Bank Performance: Evidence from South Africa. *Problems and
 Prospectives in Managment* , 59-68.

Boadi, E. K. (2015). An Emperical Analysis of Leverage and Financial Performance of
 Listed Non-Financial Firms in Ghana. *International Journal of Economics and
 Finance* , 120-135.

Bonn. (2005, June). *International Competition Network* . Retrieved April 16, 2016, from
 International Competition Network .org/uploads/library/doc382.pdf:
 www.International Competition Network .org

Brigham, E. H. (2007). *Fundamentals of Financial Managment.* USA: Macmillian
 Publishing Solutions.

Brooks, C. (2008). *Introductory Econometrics for Finance* (Vol. Second Edition). New York:

Cambridge University Press.

Carlson, M. a. (2005). *http://www.federalreserve.gov/pubs/feds/2005/200520/200520pap.pdf*.
        Retrieved December 27, 2015

Cekrezi, A. (2015). Factors Affecting Performance of Commercial Banks in Albania. *The
        European Proceedings of Social and Behavioral Sciences* , 1-13.

CFO Reaserch Service. (2010). *Capital Management in Banking.* Boston: CFO Publishing
        LLC.

Dager Alper, A. A. (2011). Bank Specific and Macro Economic Determinants of Commercial
        Bank Profitablity: Emperical Evidence from Turkey. *Business and Economics
        Research Journal* , 139-152.

Dunn, R. M. (2000). *International Economics.* London: Routledge.

Ebrati, M. R. (2013). The Impact of Capital Structure on Firm Performance: Evidence from
        Tehran Stock Exchange. *Australian Journal of Basic and Applied Sciences* , 1-8.

Eugene F. Brigham, J. F. (2007). *Fundamentals of Financial Managment.* USA: Macmillian
        Publishing Solutions.

European Central Bank. (2010). *Beyound ROE-How to Measure Bank Performance.*
        Frankfurt: European Central Bank,.

Eurpoean Banking Federation. (2010). *Bank Levearge and its Economic Implication.*
        Brussels: EBF.

Fadzlan Sufian, R. R. (2008). Determinants of Bank Profitablity in a Developing
        Economy:Emerical Evidence from the Phillipines. *Asian Acadamy of Managment
        Journal of Accounting and Finance* , 91-112.

Farouk, B. P. (2015). Impact of Investment in Information Technology on Financial
        Performance of Nigerian Banks: Is there a Productivity Paradox. *Journal of Internet
        Banking and Commerce* , 1-22.

Fentaw, L. (2015). Meta Analysis on the Determinants of Commercial Bank's Profitablity: A
        conceptual Frame Work and Modelling. *European Sceintific Journal* , 323-351.

Fisseha, F. L. (2015). Meta Analysis on the Determinants of Commercial Bank's Profitablity:
        A conceptual Frame Work and Modelling. *European Sceintific Journal* , 323-351.

Frederick, N. K. (2014). Factors Affecting Performance of Commercial Banks in Uganda A

case for Domestic Commerial Banks. *Proceeding of 25 th International Business Research Conference* , 1-19.

Geda, A. *The Structure and Performance of Ethiopias Financial sector:In the pre and post reform period with Special Focus in banking.* Draft.

Genchev, E. (2012). Effects of Market Share on Banks Profitablity. *Review of Applied Socio-Economic Research* , 87-95.

George Owusu-Antwi, L. M. (2015). Determinants of Bank Performance in Ghana, the Economic Value Added (EVA) Approach. *International Journal of Economics and Finance;* , 203-215.

Guru, B. S. (no date). *Determinants of Commercial Bank Profitablity in Malaysia*. Retrieved September 29, 2015, from http://web.usm.my/aamj/5.2.2000/5-2-1.pdf:

Gweyi, M. O. (2014). Effect of Financial Leverage on Financial Performance of Deposit Taking savings and Credit Co-operative in Kenya. *International Journal of Acadamic Research in Accounting Finance and Managment Sciences* , 176-184.

Habtamu, N. (2012). Determinants for Bank Profitablity: An Emperical study on Ethiopian Private Commercial Banks.Master thesis.Addis Ababa University, Ethiopia.

Hans Falkena, G. D. (2004, April). *http://www.finforum.co.za/*. Retrieved September 20, 2015, from http://www.finforum.co

Harimaya, K. a. (no date). T*he effects of Branch expansion on Bank Efficiency: Evidence from Japanese Regional Banks*. Retrieved December 27,2015, from*http://www.kmfa.or.kr/paper/annual/2012/1_3_1.pdf.*

Hayman, D. N. (1989). *Economics.* Boston: Richard D. Irwin, Inc.

Heimler, A. (2006). Competition Policy, Antitrust Enforcement and Banking. *Fourth Meeting of the Latin America Competition Forum* (pp. 2-13). SanSalvador: OECD and Inter American Development.

Ho, S. J. (2006, November 7). *The Impact of Information Technology on the Banking Industry: Theory and Emprics*. RetrievedOctober 15, 2015, from *http://webspace.qmul.ac.uk/pmartins/mallick.pdf*

Howells, P. a. (2007). *Financial Market and Institutions.* London: Pearson Education.

Ines Ayadi, A. E. (2015). The Determinants of the Tunisian Banking Performance: A Panel Data Analysis. *International Journal of Finance and Economics* , 262-272.

Inyiama, O. I. (2015). Does Earning Per Share Determine Market Price Of Ordinary Shares?
Evidence From Nigeria Banking Sector (2000 – 2013). *European Journal of Accounting Auditing and Finance Research* , 91-102.

International Monetery Fund. (2009). *The Determinants of Commercial Bank Profitablity in Sub-Saharan Africa.* IMF.

JAGIRANI TAHIR SAEED, J. H. (2007-2013). Relationship between Earning Per Share & Bank Profitability A Study of Medium & Large commercial Banks in Pakistan. *International Journal of Novel Research in Humanity and Social Sciences* , 4-13.

John Beardshaw, D. B. (1998). *Economics, A student's Guide.* London: Pearson Education Asia Pte Ltd.

Joseph E. Stiglitz, J. D. (2000). *Economics.* New york: W.W. Norton and Company,Inc.

Karama Mohana Rao, T. B. (2012). Determinants of Profitablity of Commercial banks in a Developing Country: Evidence from Ethiopia. *International Journal of Accounting and Financial management Research* , 1-20.

King, M. R. (2009, September). The cost of equity for global banks: a CAPM perspective from 1990 to 2009. *BIS Quarterly Review* , pp. 59-73.

Klimentina Poposka, M. T. (2013). Secondery Model for Bank Profitablity Management-Test on the case of Macedonian Banking Sector. *Research Journal of Finance and Accounting* , 216-225.

Kotler, P. a. (2012). *Principles of Marketing.* New Jersey: Pearson.

Lelisa, T. B. (2014). The Determinants of Ethiopian Commercial Banks Performance. *Ethiopean Journal of Business and Managment* , 52-61.

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature* , 688-726.

Li, E. K. (2015). An Emperical Analysis of Leverage and Financial Performance of Listed Non-Financial Firms in Ghana. *International Journal of Economics and Finance* , 120-135.

Madura, J. (2000). *International Financial Mnagment* (Vol. 6th). New York: South Western an International Thomson Publishing Company.

Madura, J. (2010). *Financial Markets and Institutions.* Library of Congress.

Marco Di Antonio, L. M. (2015, July). *http://www.researchgate.net/publication/280227347.*

Retrieved October 26, 2015, from http://www.researchgate.net

Mengistu, M. M. (2015). Evaluation of the Financial Performance of Banking Sectors in Ethiopia: The Case of Zemen Bank. *Global Journal of Management and Business Research* .

Mishkin, F. S. (2004). *The Economics of Money, Banking, and Financial Markets.* New York: Library of Congress.

Mohammad Reza Ebrati, F. E. (2013). The Impact of Capital Structure on Firm Performance: Evidence from Tehran Stock Exchange. *Australian Journal of Basic and Applied Sciences* , 1-8.

Moses Ochieng Gweyi, J. K. (2014). Effect of Financial Leverage on Financial Performance of Deposit Taking savings and Credit Co-operative in Kenya. *International Journal of Acadamic Research in Accounting Finance and Managment Sciences* , 176-184.

Muhabie, M. (2015). Evaluation of the Financial Performance of Banking Sectors in Ethiopia: The Case of Zemen Bank. *Global Journal of Management and Business Research* .

Nadeem Aftab, N. S. (2015). Historical Analysis of Bank Profitablity Using CAMEL Parameters Role of Ownership and Political Regimes in Pakistan. *International Journal of Economocs and Finance* , 144-155.

National Bank of Ethiopia. (2014/15). *Quarterly Bulletin Third Quarter.* Addis Ababa:

Obamuyi, T. (2013). Determinants of Bank Profitablty in a Developing Economy: Evidence from Nigeria. *Organisations and Markets in Emerging Economies* , 97-111.

Odunga R.M, N. P. (2013). Liquidity, Capital Adequacy and Operating Efficiency of Commercial Banks in Kenya. *Research Journal of Finance and Accounting* , 76-80.

Oino, I. (2015). Competitivness and Determinants of Bank Profitablty in Sub- Saharan Africa. *International Journal of Economics and Finance* , 151-162.

Ojo, O. M. (2012). Marketing Strategies and Bank Performance in Nigeria: A post Consolidation Analysis. *Research Journal of Finance and Accounting* , 93-102.

Oliver Ike Inyiama Ph.D, F. (2015). Does Earning Per Share Determine Market Price of Ordinary Shares? Evidence From Nigeria Banking SECTOR (2000 – 2013). *European Journal of Accounting Auditing and Finance Research* , 91-102.

Ongore, V. a. (2013). Determinants of Financial Performance of Commercial banks in

Kenya. *International Journal of economics and Financial Issues* , 237-252.

Örs, E. (2003). *https://www.cerge-ei.cz/pdf/events/papers/031201_t.pdf.* Retrieved september 15, 2015

Panayiotis P. Athanasoglou, S. N. (2005, June). Working Paper. *Bank Specific, Industry Specific and macro Economic determminans of Bank profitablity* , pp. 1-35.

Paul A Samuelson, W. D. (2010). *Economics* (Vol. 19 th). New Delhi: Tata McGraw Hill Education Private Limited.

Peter Howells, K. B. (2007). *Financial Market and Institutions.* London: Pearson Education.

Philip Kotler, G. A. (2012). *Principles of Marketing.* New Jersey: Pearson.

Rachdi, H. (2013). What Determines the Profitablity of Banks During and Before The International Financial Crises? Evidece from Tunisia. *International Journal of Economics, Finance and Managment* , 330-337.

Rao, K. a. (2012). Determinants of Profitablity of Commercial banks in a Developing Country: Evidence from Ethiopia. *International Journal of Accounting and Financial management Research* , 1-20.

Richard J. Rivard, C. R. (1997). The Effect of Interstate Banking on Large Bank Holding Company Profitablity. *Journal of Economics and Business* , 61-76.

Robert M. Dunn, J. J. (2000). *International Economics.* London: Routledge.

Saeed, J. a. (2007-2013). Relationship between Earning Per Share & Bank Profitability A Study of Medium & Large commercial Banks in Pakistan. *International Journal of Novel Research in Humanity and Social Sciences* , 4-13.

Salvatore, D. (1995). *International Economics.* New Jersey: Prentice Hall International, Inc.

Samuelson, P. A. (2010). *Economics* (Vol. 19 th). New Delhi: Tata McGraw Hill Education Private Limited.

Sara Kenwal, M. N. (2013). The impact of Macro Economic Variables on the Profitablity of Listed Commercial Banks in Pakistan . *European Journal of Business and Social Sciences* , 186-201.

Sardar Muhammad Zahid, M. A. (2015). Capital Adequacy Behaviour: Emperical Evidence from Banking Sector of Pakistan. *International Journal of Economics and Finance* , 96-104.

Sheefeni, J. P. (2015). The Macro Economic Determinants of Profitablity among

Commercial Banks in Namibia. *Journal of Emerging Issues in Economics, Finance and Banking* , 1414-1431.

Steven A. Zimmer, R. N. (1991). Bank Cost of Capital and International Competition. *FRBNY Quarterly Review* , pp. 33-59.

Stiglitz, J. D. (2000). *Economics.* New york: W.W. Norton and Company,Inc.

Sufian, F. C. (2008). Determinants of Bank Profitablity in a Developing Economy:Emperical Evidence from the Phillipines. *Asian Acadamy of Managment Journal of Accounting and Finance* , 91-112.

Tesfaye, B. (2014). The Determinants of Ethiopian Commercial Banks Performance. *Ethiopean Journal of Business and Managment* , 52-61.

Tony Addison, A. G. (2002). *Ethiopia's New Financial Sector And ItsRegulation.* Working Paper Series, Nairobi.

Uddin, N. (2015). Productivity Relevance of Capital Structure. *International Journal of Economics and Finance* , 31-49.

Valentina Flamini, C. M. (2009). *The Determinants of Commercial Bank Profitablity in Sub-Saharan Africa.* IMF.

Vincent Okoth Ongore, G. B. (2013). Determinants of Financial Performance of Commercial banks in Kenya. *International Journal of economics and Financial Issues* , 237-252.

Wheelock, D. C. (1995). *Why Do Banks Disappear: The Determinants of U.S. Bank Failures and Acqustions.* St Louis: Review of Economics and Statistics.

Zahid, S. M. (2015). Capital Adequacy Behaviour: Emperical Evidence from Banking Sector of Pakistan. *International Journal of Economics and Finance* , 96-104.

Zahra Saravani, M. N. (2015). Evaluation of Bank Market Share and its Affective Determinants: Sepah Bank. *International Research Journal of Applied and Basic Sciences* , 1003-1009.

Zerayehu S. E., K. W. (2013, December 03). Competition in Ethiopian Banking Industry. *African Journal of Economics* , 175-190.

Zimmer, S. A. (1991). Bank Cost of Capital and International Competition. *FRBNY Quarterly Review* , pp. 33-59.

Appendix-1

Graphical representation of ROA, ROE and NIM
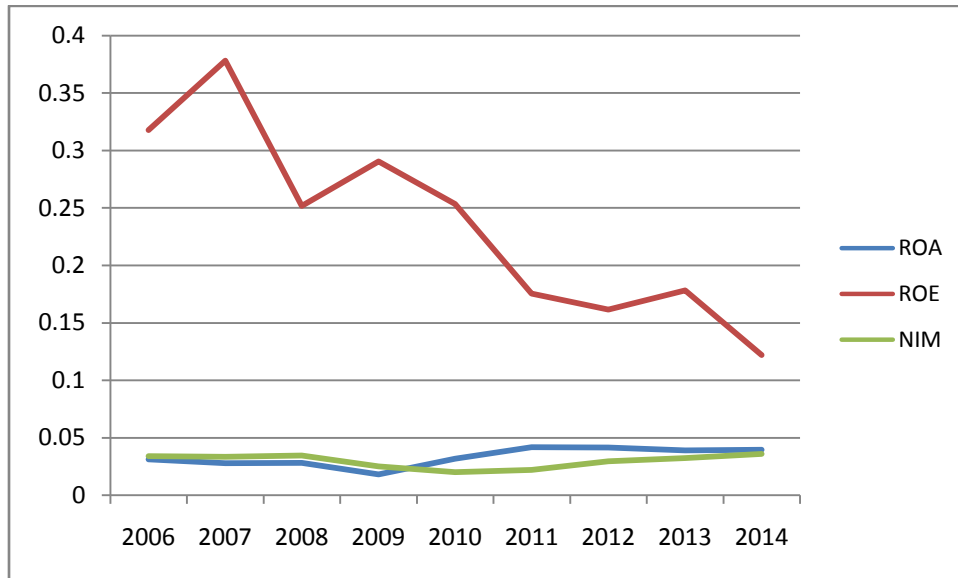
Appendix-2

Financial Data

Bank Name	Year	ASSET	LIABLITIES	CAPITAL	EQUITY
Awash International Bank	2006	3,412,621,685.00	3,070,862,806.00	273,582,695.00	200,000,000.00
Awash International Bank	2007	4,365,374,447.00	3,882,843,264.00	387,545,101.00 s	282,300,378.00
Awash International Bank	2009	6,422,720,235.00	5,661,415,458.00	608,939,470.00	445,483,236.00
Awash International Bank	2010	7,944,783,775.00	6,985,434,832.00	782,963,965.00	550,000,000.00
Awash International Bank	2011	10,115,997,116.00	8,779,500,567.00	1,066,474,363.00	734,069,582.00
Awash International Bank	2012	11,936,683,441.00	10,286,052,310.00	1,355,263,828.00	912,253,280.00
Awash International Bank	2013	12,657,932,051.00	14,013,336,585.00	1,737,812,490.00	1,170,381,418.00
Awash International Bank	2014	20,028,290,203.00	17,431,347,257.00	2,133,842,682.00	1,394,066,531.00
Dashen Bank	2006	4,546,012,978.00	4,160,140,176.00	310,872,802.00	156,190,000.00
Dashen Bank	2007	6,039,408,979.00	5,494,936,857.00	483,900,960.00	282,210,000.00
Dashen Bank	2008	7,718,928,030.00	6,988,318,373.00	650,731,290.00	453,993,000.00
Dashen Bank	2009	9,732,583,441.00	8,823,888,714.00	787,719,089.00	528,512,000.00
Dashen Bank	2010	12,353,386,038.00	11,230,038,407.00	932,076,401.00	591,860,000.00
Dashen Bank	2011	14,659,795,156.00	13,263,392,885.00	1,151,589,242.00	698,709,000.00
Dashen Bank	2012	17,520,042,319.00	15,692,148,624.00	1,319,672,272.00	703,789,000.00
Dashen Bank	2013	19,747,174,767.00	17,701,476,071.00	1,504,786,368.00	737,214,000.00
Dashen Bank	2014	21,962,202,063.00	19,364,576,867.00	2,009,811,438.00	1,064,118,000.00
Abyssinia Bank	2006	2,833,727,526.00	2,432,103,952.00	336,163,615.00	264,713,109.00
Abyssinia Bank	2007	3,396,156,430.00	2,993,405,124.00	353,025,706.00	265,000,000.00
Abyssinia Bank	2008	4,269,946,935.00	3,849,866,780.00	407,588,561.00	312,571,450.00
Abyssinia Bank	2009	5,476,625,540.00	4,957,396,033.00	445,742,116.00	313,141,425.00
Abyssinia Bank	2010	6,279,540,204.00	5,694,048,517.00	482,746,086.00	315,000,000.00
Abyssinia Bank	2011	7,277,567,360.00	6,616,808,850.00	527,355,976.00	315,000,000.00
Abyssinia Bank	2012	8,239,513,662.00	7,332,919,774.00	745,195,696.00	478,897,703.00
Abyssinia Bank	2013	10,160,113,834.00	9,052,479,241.00	909,513,734.00	577,025,454.00
Abyssinia Bank	2014	11,276,391,264.00	9,747,423,054.00	1,326,384,688.00	923,971,393.00
Wegagen Bank	2006	2,259,544,521.00	2,004,876,253.00	201,521,008.00	147,605,000.00
Wegagen Bank	2007	3,480,280,390.00	3,077,074,424.00	319,974,677.00	233,139,000.00
Wegagen Bank	2008	4,124,891,893.00	3,519,443,105.00	501,320,658.00	370,825,000.00

Wegagen Bank	2009	5,118,311,459.00	4,281,896,875.00	700,962,822.00	517,618,000.00
Wegagen Bank	2010	5,741,936,575.00	4,690,210,544.00	884,220,345.00	633,170,000.00
Wegagen Bank	2011	8,060,937,378.00	6,723,602,221.00	1,094,876,863.00	779,316,000.00
Wegagen Bank	2012	8,347,154,788.00	6,743,021,620.00	1,352,408,189.00	952,939,000.00
Wegagen Bank	2013	10,393,803,401.00	8,563,378,581.00	1,575,381,597.00	1,090,898,000.00
Wegagen Bank	2014	11,528,769,913.00	9,384,554,521.00	1,905,384,796.00	1,341,291,000.00
United Bank	2006	1,599,568,803.00	1,408,209,165.00	157,154,718.00	130,834,967.00
United Bank	2007	2,182,743,809.00	1,823,009,474.00	309,176,558.00	259,326,669.00
United Bank	2008	3,250,281,316.00	2,782,409,379.00	399,107,892.00	330,277,074.00
United Bank	2009	4,652,443,000.00	4,132,468,491.00	519,974,509.00	355,202,724.00
United Bank	2010	5,896,233,355.00	5,258,679,129.00	506,348,426.00	373,187,498.00
United Bank	2011	7,725,441,470.00	6,824,076,125.00	724,666,332.00	523,298,077.00
United Bank	2012	8,786,859,949.00	7,685,143,536.00	859,658,113.00	580,942,925.00
United Bank	2013	9,977,673,169.00	8,776,525,030.00	951,101,595.00	600,000,000.00
United Bank	2014	11,876,368,588.00	10,301,096,849.00	1,335,917,451.00	898,275,709.00
Nib Int Bank	2006	2,027,020,081.00	1,741,999,737.00	244,748,978.00	200,000,000.00
Nib Int Bank	2007	2,606,596,372.00	2,181,450,251.00	371,359,284.00	297,573,500.00
Nib Int Bank	2008	3,650,111,159.00	3,051,986,485.00	517,679,496.00	416,901,000.00
Nib Int Bank	2009	4,806,507,027.00	4,077,683,469.00	619,151,910.00	487,129,000.00
Nib Int Bank	2010	5,970,511,304.00	5,054,002,878.00	773,471,756.00	579,867,000.00
Nib Int Bank	2011	7,111,808,078.00	5,941,048,159.00	986,635,172.00	717,018,500.00
Nib Int Bank	2012	8,275,695,377.00	6,747,749,153.00	1,313,970,484.00	943,806,500.00
Nib Int Bank	2013	9,144,543,615.00	7,478,614,296.00	1,451,928,655.00	999,399,000.00
Nib Int Bank	2014	10,747,283,267.00	8,782,926,239.00	1,729,731,000.00	1,201,027,500.00
Cooperative Bank of Oromiya	2006	224,372,434.00	101,615,710.00	122,756,724.00	121,802,154.00
Cooperative Bank of Oromiya	2007	422,099,588.00	291,141,160.00	130,958,428.00	127,367,144.00
Cooperative Bank of Oromiya	2008	678,207,897.00	529,877,491.00	143,944,993.00	132,947,947.00
Cooperative Bank of Oromiya	2009	1,022,881,951.00	866,472,195.00	150,149,446.00	138,466,212.00
Cooperative Bank of Oromiya	2010	1,768,615,138.00	1,579,612,058.00	169,236,954.00	151,122,295.00
Cooperative Bank of Oromiya	2011	2,500,359,169.56	2,254,522,267.50	206,896,040.11	176,760,539.10
Cooperative Bank of Oromiya	2012	3,670,725,943.40	3,253,512,030.96	338,028,521.00	280,637,851.61
Cooperative Bank of Oromiya	2013	6,537,470,275.00	5,841,478,789.00	549,494,443.00	442,337,900.00
Cooperative Bank of Oromiya	2014	7,350,371,854.00	6,259,995,681.00	825,931,141.00	632,138,300.00

Bank	Year				
Lion International Bank	2007	266,734,870.00	131,766,097.00	134,968,773.00	139,824,710.00
Lion International Bank	2008	574,138,119.00	403,126,487.00	171,011,632.00	176,696,900.00
Lion International Bank	2009	952,468,452.00	760,705,678.00	193,693,054.00	193,693,054.00
Lion International Bank	2010	1,363,612,433.00	1,121,813,464.00	241,798,969.00	204,170,774.00
Lion International Bank	2011	1,808,056,597.00	1,455,135,359.00	313,477,228.00	292,650,960.00
Lion International Bank	2012	2,463,031,718.00	2,021,305,879.00	375,646,286.00	335,968,803.00
Lion International Bank	2013	2,942,432,757.00	2,400,487,472.00	442,437,449.00	374,935,939.00
Lion International Bank	2014	3,613,339,108.00	2,985,519,144.00	538,479,859.00	446,833,287.00
Oromia International Bank	2009	326,358,016.00	219,075,807.00	120,820,023.00	115,480,336.00
Oromia International Bank	2010	1,118,572,701.00	906,562,518.00	211,108,333.00	197,287,083.00
Oromia International Bank	2011	1,961,838,706.00	1,665,821,673.00	261,842,253.00	235,214,299.00
Oromia International Bank	2012	2,787,394,118.00	2,349,711,530.00	404,392,028.00	374,550,941.00
Oromia International Bank	2013	3,911,231,433.00	3,363,628,089.00	489,579,964.00	439,131,927.00
Oromia International Bank	2014	6,151,660,507.00	5,403,139,124.00	633,240,666.00	540,499,430.00
Zemen Bank	2009	462,598,683.00	372,082,934.00	90,515,749.00	99,657,675.00
Zemen Bank	2010	1,055,622,793.00	897,029,111.00	158,593,682.00	120,575,976.00
Zemen Bank	2011	1,613,912,451.00	1,373,202,973.00	183,926,538.00	149,576,000.00
Zemen Bank	2012	2,394,242,097.00	2,113,641,723.00	205,519,571.00	149,576,000.00
Zemen Bank	2013	3,248,479,460.00	2,754,992,833.00	423,293,058.00	343,813,000.00
Zemen Bank	2014	3,924,769,457.00	3,267,757,912.00	561,157,430.00	449,576,000.00
Buna International Bank	2010	480,117,193.00	311,014,290.00	169,066,805.00	169,054,773.00
Buna International Bank	2011	781,365,755.00	548,931,845.00	218,243,934.00	213,363,942.00
Buna International Bank	2012	1,365,032,038.00	1,078,020,124.00	264,902,271.00	252,514,432.00
Buna International Bank	2013	2,128,453,819.00	1,753,553,900.00	335,432,227.00	307,641,777.00
Buna International Bank	2014	3,011,945,779.00	2,495,181,651.00	466,633,642.00	417,445,903.00
Berhan International Bank	2010	365,497,142.00	274,258,640.00	108,324,930.00	108,324,930.00
Berhan International Bank	2011	913,783,205.00	763,841,134.00	139,980,564.00	134,671,304.00
Berhan International Bank	2012	1,285,037,438.00	1,048,892,230.00	1,259,767,998.00	197,143,362.00
Berhan International Bank	2013	2,197,315,312.00	1,815,766,949.00	339,805,666.00	313,000,920.00
Berhan International Bank	2014	2,814,260,901.00	2,259,818,765.00	487,186,145.00	435,532,329.00
Awash International Bank	2006	578,085,765.00	2,022,048,650.00	121,168,665.00	177,927,916.00	54,523,480.00
Awash International Bank	2007	697,938,076.00	2,426,412,932.00	294,846,699.00	232,346,001.00	84,680,302.00
Awash International Bank	2009	1,132,932,418.00	3,648,934,344.00	180,543,692.00	414,632,251.00	180,056,886.00

Awash International Bank	2010	1,383,089,286.00	4,660,887,627.00	61,963,280.00	303,329,442.00	154,923,346.00
Awash International Bank	2011	2,014,008,960.00	5,647,594,656.00	82,177,641.00	394,708,733.00	209,473,117.00
Awash International Bank	2012	2,158,287,879.00	6,565,012,081.00	481,057,706.00	668,692,913.00	284,935,118.00
Awash International Bank	2013	3,289,689,122.00	8,505,559,900.00	749,959,600.00	890,192,139.00	362,656,944.00
Awash International Bank	2014	3,628,751,400.00	10,250,098,800.00	1,160,865,300.00	1,089,097,379.00	475,571,518.00
Dashen Bank	2006	1,039,091,412.00	2,343,244,480.00	309,267,163.00	227,942,449.00	66,887,818.00
Dashen Bank	2007	1,360,926,459.00	2,842,853,597.00	656,767,450.00	299,345,467.00	92,511,233.00
Dashen Bank	2008	1,616,812,548.00	3,841,932,645.00	692,776,352.00	403,530,085.00	162,148,506.00
Dashen Bank	2009	2,189,749,336.00	5,033,506,814.00	701,954,139.00	431,238,109.00	199,447,691.00
Dashen Bank	2010	2,715,397,280.00	6,730,372,408.00	698,780,088.00	477,299,822.00	248,187,407.00
Dashen Bank	2011	3,408,063,676.00	7,797,453,958.00	635,721,100.00	603,677,566.00	325,272,464.00
Dashen Bank	2012	4,392,717,362.00	8,888,844,618.00	784,038,019.00	897,730,373.00	410,231,198.00
Dashen Bank	2013	4,265,723,242.00	10,577,451,364.00	1,008,089,811.00	1,004,928,293.00	489,876,882.00
Dashen Bank	2014	4,602,875,760.00	11,906,048,899.00	1,172,418,507.00	1,140,821,933.00	573,158,251.00
Abyssinia Bank	2006	403,228,373.00	1,548,299,795.00	225,357,313.00	165,275,931.00	40,771,344.00
Abyssinia Bank	2007	511,058,029.00	1,898,101,450.00	312,168,110.00	201,548,788.00	60,490,965.00
Abyssinia Bank	2008	785,253,055.00	2,411,495,128.00	281,018,825.00	252,419,524.00	93,403,514.00
Abyssinia Bank	2009	1,211,306,002.00	3,049,747,076.00	233,133,349.00	275,894,414.00	112,066,716.00
Abyssinia Bank	2010	1,219,362,320.00	3,783,281,471.00	136,203,838.00	261,875,112.00	127,308,195.00
Abyssinia Bank	2011	1,591,369,708.00	4,422,862,487.00	61,026,703.00	372,078,977.00	163,717,626.00
Abyssinia Bank	2012	1,630,501,927.00	4,923,709,126.00	217,034,535.00	497,487,397.00	208,451,466.00
Abyssinia Bank	2013	2,058,340,880.00	5,896,340,653.00	541,466,765.00	583,509,267.24	258,228,327.00
Abyssinia Bank	2014	1,851,585,442.00	6,402,068,251.00	842,823,249.00	734,201,655.00	316,109,832.00
Wegagen Bank	2006	724,719,921.00	723,438,571.00	330,259,536.00	120,457,213.00	34,553,832.00
Wegagen Bank	2007	1,209,514,631.00	803,529,234.00	710,581,992.00	185,021,035.00	55,291,901.00
Wegagen Bank	2008	1,190,997,021.00	1,095,421,422.00	679,911,714.00	238,242,127.00	89,677,115.00
Wegagen Bank	2009	1,870,202,899.00	1,517,982,068.00	340,197,190.00	233,543,954.00	83,458,171.00
Wegagen Bank	2010	1,770,337,412.00	1,960,453,766.00	192,007,539.00	247,251,582.00	75,742,832.00
Wegagen Bank	2011	3,116,926,125.00	2,529,438,040.00	311,119,668.00	314,852,236.00	100,194,471.00
Wegagen Bank	2012	2,329,553,638.00	2,873,022,631.00	555,604,620.00	441,664,543.00	139,882,171.00
Wegagen Bank	2013	3,032,786,061.00	3,986,921,041.00	7,508,225,153.00	585,446,928.00	172,375,006.00
Wegagen Bank	2014	3,085,420,809.00	4,663,606,699.00	636,083,798.00	659,985,510.00	230,458,974.00
United Bank	2006	344,718,241.00	683,359,353.00	264,682,213.00	71,269,924.00	27,822,647.00
United Bank	2007	395,486,663.00	854,678,413.00	430,604,503.00	122,146,169.00	38,301,382.00
United Bank	2008	674,005,399.00	1,364,415,813.00	404,930,698.00	171,133,540.00	61,332,766.00

Bank	Year				
United Bank	2009	1,106,187,593.00	1,984,477,422.00	525,087,081.00	210,075,178.00	85,917,228.00
United Bank	2010	1,502,109,946.00	2,856,888,878.00	365,856,417.00	251,012,597.00	104,293,661.00
United Bank	2011	2,044,020,612.00	3,598,373,996.00	423,432,374.00	338,876,119.00	144,838,065.00
United Bank	2012	1,803,821,390.00	4,212,316,984.00	741,377,888.00	518,648,734.00	198,655,430.00
United Bank	2013	2,261,484,950.00	5,133,096,998.00	668,893,227.00	601,594,131.00	247,312,618.00
United Bank	2014	2,679,000,605.00	5,670,918,458.00	1,052,156,777.00	716,229,895.00	278,334,723.00
Nib Int Bank	2006	327,306,953.00	836,589,389.00	287,875,543.00	106,187,449.00	33,094,423.00
Nib Int Bank	2007	422,953,177.00	1,084,627,147.00	371,354,235.00	147,290,760.00	42,138,001.00
Nib Int Bank	2008	670,979,595.00	1,436,580,753.00	362,370,955.00	209,998,084.00	62,217,698.00
Nib Int Bank	2009	1,031,726,983.00	1,995,516,308.00	269,146,679.00	253,590,455.00	75,112,910.00
Nib Int Bank	2010	1,308,874,579.00	2,517,185,658.00	301,128,243.00	266,283,969.00	89,710,018.00
Nib Int Bank	2011	1,801,799,977.00	3,137,259,029.00	218,342,337.00	332,858,672.00	119,419,282.00
Nib Int Bank	2012	2,018,573,499.00	3,476,578,086.00	342,975,224.00	433,645,833.00	151,907,746.00
Nib Int Bank	2013	2,123,659,349.00	3,980,683,317.00	550,871,375.00	570,518,514.00	199,499,593.00
Nib Int Bank	2014	2,511,484,656.00	4,547,006,840.00	864,801,680.00	694,089,326.00	229,802,244.00
Cooperative Bank of Oromiya	2006	64,144,333.00	22,223,831.00	11,500,000.00	5,290,187.00	359,514.00
Cooperative Bank of Oromiya	2007	166,160,410.00	86,122,911.00	25,000,000.00	14,619,836.00	1,690,876.00
Cooperative Bank of Oromiya	2008	281,254,477.00	185,448,531.00	23,200,000.00	32,056,756.00	5,351,739.00
Cooperative Bank of Oromiya	2009	312,032,886.00	332,017,517.00	144,634,482.00	44,984,033.00	12,057,226.00
Cooperative Bank of Oromiya	2010	534,286,579.00	570,582,830.00	266,946,687.00	74,915,180.00	27,317,295.00
Cooperative Bank of Oromiya	2011	767,831,871.99	961,606,774.54	250,977,643.90	94,944,490.87	43,054,348.76
Cooperative Bank of Oromiya	2012	1,346,119,651.98	1,250,442,415.79	200,981,620.13	172,047,180.29	59,243,257.83
Cooperative Bank of Oromiya	2013	2,272,421,808.00	2,074,886,599.00	117,730,658.00	239,671,564.00	68,652,308.00
Cooperative Bank of Oromiya	2014	2,528,622,791.00	2,765,209,999.00	156,264,477.00	422,291,243.00	100,963,410.00
Lion International Bank	2007	58,004,695.00	53,191,276.00	11,060,000.00	3,264,804.00	375,089.00
Lion International Bank	**2009**	**304,721,436.00**	**347,344,069.00**	**50,362,115.00**	**32,698,524.00**	**11,348,833.00**
Lion International Bank	2010	387,526,961.00	525,465,551.00	100,755,270.00	56,375,029.00	19,787,928.00
Lion International Bank	2011	536,930,226.00	730,000,556.00	27,267,000.00	75,774,359.00	27,141,460.00
Lion International Bank	2012	588,316,195.00	1,048,763,278.00	97,482,398.00	115,711,928.00	40,131,704.00
Lion International Bank	2013	614,611,814.00	1,282,241,873.00	192,964,532.00	168,961,597.00	55,789,902.00
Lion International Bank	2014	775,643,165.00	1,635,158,298.00	263,314,106.00	209,107,189.00	73,953,610.00
Oromia International Bank	2009	90,695,812.00	79,831,030.00	18,970,839.00	3,640,873.00	565,226.00
Oromia International Bank	2010	212,701,053.00	318,758,890.00	289,474,694.00	30,383,601.00	15,227,071.00

Oromia International Bank	2011	599,924,863.00	643,010,327.00	283,383,650.00	62,081,058.00	32,570,986.00
Oromia International Bank	2012	814,856,864.00	968,518,974.00	333,921,060.00	122,431,572.00	55,395,483.00
Oromia International Bank	2013	1,216,403,604.00	1,525,539,690.00	308,496,009.00	195,840,271.00	63,722,615.00
Oromia International Bank	2014	2,096,735,020.00	2,615,758,670.00	291,502,119.00	326,599,322.00	101,400,119.00
Zemen Bank	2009	40,536,456.00	96,653,186.00	140,658,154.00	4,590,108.00	2,908,012.00
Zemen Bank	2010	148,371,595.00	308,857,682.00	230,795,386.00	31,240,880.00	22,815,510.00
Zemen Bank	2011	256,640,992.00	731,761,013.00	174,157,423.00	60,638,462.00	41,063,046.00
Zemen Bank	2012	388,586,849.00	1,137,899,821.00	259,790,663.00	102,833,130.00	66,123,160.00
Zemen Bank	2013	622,085,776.00	1,772,572,818.00	106,604,291.00	150,114,285.00	100,522,326.00
Zemen Bank	2014	940,026,996.00	1,963,038,878.00	127,804,829.00	205,430,993.00	114,450,637.00
Buna International Bank	2010	72,538,333.00	86,723,941.00	80,000,000.00	8,433,698.00	1,898,658.00
Buna International Bank	2011	117,819,248.00	233,497,200.00	140,000,000.00	34,069,683.00	13,090,991.00
Buna International Bank	2012	273,714,275.00	444,941,678.00	184,650,000.00	63,163,727.00	23,372,756.00
Buna International Bank	2013	566,120,483.00	755,436,648.00	226,052,163.00	120,916,912.00	39,688,054.00
Buna International Bank	2014	663,582,816.00	1,129,550,072.00	358,457,851.00	180,559,613.00	55,397,929.00
Berhan International Bank	2010	72,764,985.00	72,942,786.00	92,302,995.00	5,854,990.00	1,837,228.00
Berhan International Bank	2011	185,308,679.00	214,210,646.00	294,737,680.00	34,097,951.00	17,693,717.00
Berhan International Bank	2012	334,685,020.00	403,113,382.00	193,927,643.00	57,824,390.00	28,238,089.00
Berhan International Bank	2013	569,337,618.00	763,493,007.00	260,298,185.00	87,066,878.00	39,196,680.00
Berhan International Bank	2014	644,510,309.00	1,077,540,286.00	289,752,657.00	167,764,436.00	60,593,125.00

Awash International Bank	2006	134,073,781.00	95,166,061.00	40	1,376,614.00	34,185,040.00	1466
Awash International Bank	2007	179,328,874.00	126,648,110.00	47	1,868,469.00	42,905,968.00	1698
Awash International Bank	2009	303,071,129.00	213,846,045.00	61	2,989,015.00	100,661,514.00	2284
Awash International Bank	2010	350,836,003.00	247,557,864.00	64	1,637,867.00	93,611,908.00	2424
Awash International Bank	2011	505,069,575.00	360,629,582.00	70	1,606,123.00	121,146,802.00	2724
Awash International Bank	2012	530,599,294.00	394,423,070.00	86	5,249,410.00	150,262,045.00	3219
Awash International Bank	2013	583,018,555.00	438,608,637.00	115	7,889,555.00	248,934,559.00	4011
Awash International Bank	2014	828,806,605.00	618,267,020.00	150	8,960,818.00	341,396,554.00	4787
Dashen Bank	2006	185,367,401.00	133,589,788.00	37	4,015,652.00	39,917,551.00	1379
Dashen Bank	2007	259,147,659.00	187,988,216.00	42	4,997,349.00	51,802,159.00	1623
Dashen Bank	2008	332,570,355.00	239,055,070.00	47	4,795,724.00	72,533,093.00	1866
Dashen Bank	2009	352,488,395.00	249,876,396.00	52	4,129,896.00	97,478,289.00	2249
Dashen Bank	2010	458,253,987.00	324,037,250.00	53	5,453,694.00	115,355,296.00	2541
Dashen Bank	2011	629,878,382.00	450,655,361.00	63	7,658,119.00	144,713,826.00	2826

Bank	Year						
Dashen Bank	2012	893,262,960.00	652,012,122.00	72	7,559,492.00	189,955,966.00	3042
Dashen Bank	2013	812,934,208.00	606,756,384.00	103	11,835,057.00	255,387,329.00	3690
Dashen Bank	2014	957,589,717.00	712,484,276.00	138	13,407,907.00	313,540,471.00	4284
Abyssinia Bank	2006	122,921,543.00	87,279,946.00	25	1,035,318.00	26,960,897.00	916
Abyssinia Bank	2007	94,980,332.00	66,300,800.00	29	1,483,091.00	32,697,286.00	1100
Abyssinia Bank	2008	21,907,426.00	16,655,459.00	43	2,243,488.00	46,279,309.00	1503
Abyssinia Bank	2009	145,399,775.00	100,367,944.00	46	1,853,625.00	67,089,678.00	1721
Abyssinia Bank	2010	196,335,151.00	140,581,582.00	48	2,375,115.00	80,428,585.00	1824
Abyssinia Bank	2011	258,383,255.00	178,439,547.00	55	3,954,236.00	92,008,165.00	1920
Abyssinia Bank	2012	288,579,071.00	215,768,081.00	63	3,814,659.00	107,611,884.00	2105
Abyssinia Bank	2013	351,467,528.00	264,761,145.00	78	4,793,263.00	135,813,153.00	2395
Abyssinia Bank	2014	351,488,742.00	270,711,362.00	100	5,125,390.00	174,943,268.00	2800
Wegagen Bank	2006	94,230,748.00	70,863,014.00	30	1,505,596.00	29,720,170.00	1108
Wegagen Bank	2007	152,280,865.00	110,975,052.00	38	2,793,463.00	38,902,832.00	1279
Wegagen Bank	2008	189,990,955.00	138,837,507.00	44	1,964,780.00	50,348,419.000	1450
Wegagen Bank	2009	256,101,454.00	180,602,349.00	48	2,138,499.00	74,344,643.000	1727
Wegagen Bank	2010	317,527,987.00	223,340,915.00	50	2,163,863.00	90,846,238.000	1821
Wegagen Bank	2011	458,129,749.00	323,277,726.00	54	3,648,100.00	120,492,787.00	2003
Wegagen Bank	2012	458,256,072.00	335,633,305.00	63	5,643,873.00	144,385,986.00	2230
United Bank	2006	59,645,832.00	43,684,090.00	20	1,105,190.00	13,859,278.00	686
United Bank	2007	86,860,143.00	64,274,390.00	25	1,703,338.00	22,891,653.00	941
United Bank	2008	125,831,748.00	91,036,249.00	35	1,995,378.00	34,346,397.00	1203
United Bank	2009	133,543,017.00	93,584,957.00	40	1,570,216.00	54,677,915.00	1358
United Bank	2010	247,666,914.00	174,448,169.00	42	2,877,798.00	67,743,513.00	1462
United Bank	2011	322,540,176.00	231,829,464.00	48	3,507,898.00	83,260,715.00	1708
United Bank	2012	406,496,613.00	297,858,764.00	63	4,538,177.00	117,902,896.00	1975
United Bank	2013	374,162,288.00	281,959,149.00	73	5,592,520.00	151,468,024.00	2101
United Bank	2014	361,022,700.00	278,170,018.00	94	8,243,671.00	198,927,238.00	2424
Nib Int Bank	2006	79,622,429.00	56,548,143.00	19	953,392.00	16,856,138.00	693
Nib Int Bank	2007	105,355,223.00	75,623,630.00	26	1,499,328.00	24,628,932.00	957
Nib Int Bank	2008	158,771,310.00	113,038,847.00	41	1,909,440.00	35,548,133.00	1329
Nib Int Bank	2009	219,768,667.00	154,058,453.00	43	1,543,673.00	75,112,910.00	1513
Nib Int Bank	2010	285,237,511.00	200,886,555.00	45	2,533,928.00	89,710,018.00	1606
Nib Int Bank	2011	344,074,783.00	246,432,996.00	49	1,702,280.00	96,643,155.00	1832

Bank	Year						
Nib Int Bank	2012	389,479,770.00	286,234,320.00	60	2,551,187.00	115,766,280.00	2042
Nib Int Bank	2013	378,573,939.00	286,267,552.00	71	2,519,287.00	140,070,315.00	2278
Nib Int Bank	2014	414,616,144.00	313,768,037.00	88	4,862,704.00	193,652,825.00	2351
Cooperative Bank of Oromiya	2006	(4,972,980.00)	-	12	687,988.00	3,390,543.00	114
Cooperative Bank of Oromiya	2007	2,522,257.00	1,891,693.00	17	997,523.00	6,158,256.00	202
Cooperative Bank of Oromiya	2008	15,019,569.00	11,754,371.00	22	721,900.00	9,373,692.00	306
Cooperative Bank of Oromiya	2009	3,632,761.00	2,354,481.00	28	1,043,815.00	15,450,455.00	685
Cooperative Bank of Oromiya	2010	36,140,348.00	25,096,924.00	39	1,019,430.00	24,657,379.00	874
Cooperative Bank of Oromiya	2011	68,252,176.43	47,659,554.21	45	1,329,256.90	32,894,304.97	981
Cooperative Bank of Oromiya	2012	139,774,317.56	101,002,141.03	53	1,832,239.28	42,343,229.83	1136
Cooperative Bank of Oromiya	2013	266,959,221.00	189,615,412.00	78	2,738,960.00	86,816,346.00	1427
Cooperative Bank of Oromiya	2014	475,851,926.00	344,050,986.00	106	2,683,785.00	119,780,132.00	1636
Lion International Bank	2007	(4,855,937.00)	(4,855,937.00)	8	434,404.00	3,259,176.00	277
Lion International Bank	2008	(829,331.00)	(829,331.00)	16	436,933.00	9,963,740.00	435
Lion International Bank	2009	3,788,686.00	3,788,686.00	19	917,277.00	14,821,459.00	504
Lion International Bank	2010	49,654,833.00	39,558,475.00	24	842,297.00	18,049,898.00	536
Lion International Bank	2011	61,804,966.00	43,746,596.00	29	1,161,788.00	22,995,559.00	572
Lion International Bank	2012	104,704,418.00	75,404,860.00	39	2,103,724.00	37,098,178.00	601
Lion International Bank	2013	150,597,236.00	111,296,106.00	46	3,233,949.00	46,835,220.00	689
Oromia International Bank	2009	(13,481,410.00)	(13,537,814.00)	26	608,481.00	8,835,889.00	445
Oromia International Bank	2010	21,509,630.00	19,252,886.00	27	1,254,036.00	20,050,699.00	546
Oromia International Bank	2011	56,689,287.00	44,363,907.00	36	1,903,313.00	30,076,778.00	776
Oromia International Bank	2012	65,162,223.00	45,087,414.00	45	2,950,779.00	50,333,860.00	1086
Oromia International Bank	2013	102,147,917.00	78,070,064.00	65	1,897,024.00	81,410,117.00	1336
Oromia International Bank	2014	204,891,527.00	154,343,550.00	106	3,898,913.00	124,886,921.00	1883
Zemen Bank	2009	(9,141,926.00)	(9,141,926.00)	1	857,767.00	5,492,203.00	99
Zemen Bank	2010	69,137,067.00	41,850,935.00	1	1,726,891.00	9,398,589.00	151
Zemen Bank	2011	121,132,619.00	84,709,293.00	1	1,551,592.00	15,582,974.00	191
Zemen Bank	2012	123,311,926.00	86,372,133.00	1	4,404,350.00	23,089,334.00	249
Zemen Bank	2013	123,810,854.00	94,145,946.00	1	2,128,973.00	35,498,809.00	317
Zemen Bank	2014	165,017,423.00	128,405,487.00	1	3,702,789.00	53,660,522.00	396
Buna International Bank	2010	48,130.00	48,130.00	4	641,471.00	4,569,203.00	119
Buna International Bank	2011	26,807,035.00	19,471,838.00	11	1,222,022.00	11,139,783.00	208
Buna International Bank	2012	41,315,702.00	30,031,390.00	21	2,701,532.00	14,171,107.00	263
Buna International Bank	2013	80,341,531.00	59,186,701.00	33	2,657,771.00	24,197,933.00	385

73

Bank	Year						
Buna International Bank	2014	107,612,891.00	79,953,484.00	60	4,930,989.00	50,656,843.00	550
Berhan International Bank	2010	(6,049,868.00)	(5,966,272.00)	10	392,516.00	4,025,499.00	138
Berhan International Bank	2011	25,982,764.00	21,237,039.00	12	967,372.00	8,445,017.00	188
Berhan International Bank	2012	46,521,294.00	34,114,258.00	15	1,372,757.00	14,052,954.00	288
Berhan International Bank	2013	69,992,669.00	52,289,353.00	22	1,952,749.00	22,569,614.00	409
Berhan International Bank	2014	121,656,741.00	89,293,584.00	37	1,633,483.00	44,707,982.00	693

Bank	Year							
Awash International Bank	2006	68,176,184.00	8.69	0.787	0.276	0.131	0.140	0.369
Awash International Bank	2007	85,486,082.00	9.03	0.764	0.242	0.112	0.128	0.324
Awash International Bank	2009	145,127,956.00	11.300	0.807	0.249	0.095	0.106	0.290
Awash International Bank	2010	167,565,729.00	13.53	0.813	0.27	0.092	0.138	0.333
Awash International Bank	2011	258,022,186.00	16.9	0.724	0.321	0.103	0.167	0.315
Awash International Bank	2012	280,598,938.00	17.73	0.725	0.371	0.083	0.138	0.316
Awash International Bank	2013	311,986,154.00	18.64	0.725	0.358	0.083	0.125	0.291
Awash International Bank	2014	439,945,251.00	19.58	0.695	0.403	0.08	0.117	0.295
Dashen Bank	2006	75,000,000.00	8.69	0.787	0.276	0.131	0.140	0.369
Dashen Bank	2007	80,000,000.00	9.03	0.764	0.242	0.112	0.128	0.324
Dashen Bank	2008	70,595,500.00	9.6	0.803	0.245	0.105	0.115	0.311
Dashen Bank	2009	109,128,200.00	11.300	0.807	0.249	0.095	0.106	0.290
Dashen Bank	2010	175,705,320.00	13.53	0.813	0.27	0.092	0.138	0.333
Dashen Bank	2011	225,181,000.00	16.9	0.724	0.321	0.103	0.167	0.315
Dashen Bank	2012	397,965,000.00	17.73	0.725	0.371	0.083	0.138	0.316
Dashen Bank	2013	176,456,000.00	18.64	0.725	0.358	0.083	0.125	0.291
Dashen Bank	2014	400,427,000.00	19.58	0.695	0.403	0.08	0.117	0.295
Abyssinia Bank	2006	65,459,959.00	8.69	0.787	0.276	0.131	0.140	0.369
Abyssinia Bank	2007	49,725,600.00	9.03	0.764	0.242	0.112	0.128	0.324
Abyssinia Bank	2008	-	9.6	0.803	0.245	0.105	0.115	0.311
Abyssinia Bank	2009	73,487,391.00	11.300	0.807	0.249	0.095	0.106	0.290
Abyssinia Bank	2010	102,745,601.00	13.53	0.813	0.27	0.092	0.138	0.333
Abyssinia Bank	2011	133,402,537.00	16.9	0.724	0.321	0.103	0.167	0.315
Abyssinia Bank	2012	161,398,191.00	17.73	0.725	0.371	0.083	0.138	0.316
Abyssinia Bank	2013	198,120,859.00	18.64	0.725	0.358	0.083	0.125	0.291
Abyssinia Bank	2014	202,583,521.00	19.58	0.695	0.403	0.08	0.117	0.295
Wegagen Bank	2006	45,175,171.00	8.69	0.787	0.276	0.131	0.140	0.369
Wegagen Bank	2007	70,699,646.00	9.03	0.764	0.242	0.112	0.128	0.324
Wegagen Bank	2008	88,508,710.00	9.6	0.803	0.245	0.105	0.115	0.311

Bank	Year	Value		Col4	Col5	Col6	Col7	Col8
Wegagen Bank	2009	114,670,295.00		11.300	0.807	0.249	0.095	0.106	0.290
Wegagen Bank	2010	167,505,686.00		13.53	0.813	0.27	0.092	0.138	0.333
Wegagen Bank	2011	242,458,294.00		16.9	0.724	0.321	0.103	0.167	0.315
Wegagen Bank	2012	114,143,980.00		17.73	0.725	0.371	0.083	0.138	0.316
Wegagen Bank	2013	114,343,978.00		18.64	0.725	0.358	0.083	0.125	0.291
Wegagen Bank	2014	107,279,646.00		19.58	0.695	0.403	0.08	0.117	0.295
United Bank	2006	31,852,935.00		8.69	0.787	0.276	0.131	0.140	0.369
United Bank	2007	59,128,006.00		9.03	0.764	0.242	0.112	0.128	0.324
United Bank	2008	68,148,089.00		9.6	0.803	0.245	0.105	0.115	0.311
United Bank	2009	76,335,000.00		11.300	0.807	0.249	0.095	0.106	0.290
United Bank	2010	128,378,885.00		13.53	0.813	0.27	0.092	0.138	0.333
United Bank	2011	158,034,786.00		16.9	0.724	0.321	0.103	0.167	0.315
United Bank	2012	203,481,118.00		17.73	0.725	0.371	0.083	0.138	0.316
United Bank	2013	219,319,769.00		18.64	0.725	0.358	0.083	0.125	0.291
United Bank	2014	239,354,288.00		19.58	0.695	0.403	0.08	0.117	0.295
Nib Int Bank	2006	40,271,366.00		8.69	0.787	0.276	0.131	0.140	0.369
Nib Int Bank	2007	53,786,837.00		9.03	0.764	0.242	0.112	0.128	0.324
Nib Int Bank	2008	80,445,178.00		9.6	0.803	0.245	0.105	0.115	0.311
Nib Int Bank	2009	104,188,066.00		11.300	0.807	0.249	0.095	0.106	0.290
Nib Int Bank	2010	128,733,003.00		13.53	0.813	0.27	0.092	0.138	0.333
Nib Int Bank	2011	171,236,015.00		16.9	0.724	0.321	0.103	0.167	0.315
Nib Int Bank	2012	213,975,740.00		17.73	0.725	0.371	0.083	0.138	0.316
Nib Int Bank	2013	214,000,664.00		18.64	0.725	0.358	0.083	0.125	0.291
Nib Int Bank	2014	187,700,823.00		19.58	0.695	0.403	0.08	0.117	0.295
Cooperative Bank of Oromiya	2006		-	8.69	0.787	0.276	0.131	0.140	0.369
Cooperative Bank of Oromiya	2007		-	9.03	0.764	0.242	0.112	0.128	0.324
Cooperative Bank of Oromiya	2008		-	9.6	0.803	0.245	0.105	0.115	0.311
Cooperative Bank of Oromiya	2009	5,470,379.00		11.300	0.807	0.249	0.095	0.106	0.290
Cooperative Bank of Oromiya	2010	16,666,811.00		13.53	0.813	0.27	0.092	0.138	0.333
Cooperative Bank of Oromiya	2011	38,940,862.00		16.9	0.724	0.321	0.103	0.167	0.315
Cooperative Bank of Oromiya	2012	74,899,906.00		17.73	0.725	0.371	0.083	0.138	0.316
Cooperative Bank of Oromiya	2013	139,540,250.00		18.64	0.725	0.358	0.083	0.125	0.291
Cooperative Bank of Oromiya	2014			19.58	0.695	0.403	0.08	0.117	0.295
Lion International Bank	2007		-	9.03	0.764	0.242	0.112	0.128	0.324
Lion International Bank	2008		-	9.6	0.803	0.245	0.105	0.115	0.311
Lion International Bank	2009		-	11.300	0.807	0.249	0.095	0.106	0.290
Lion International Bank	2010	11,300,692.00		13.53	0.813	0.27	0.092	0.138	0.333

Bank	Year							
Lion International Bank	2011	29,918,102.00	16.9	0.724	0.321	0.103	0.167	0.315
Lion International Bank	2012	50,045,595.00	17.73	0.725	0.371	0.083	0.138	0.316
Lion International Bank	2013	81,363,944.00	18.64	0.725	0.358	0.083	0.125	0.291
Lion International Bank	2014		19.58	0.695	0.403	0.08	0.117	0.295
Oromia International Bank	2009		11.300	0.807	0.249	0.095	0.106	0.290
Oromia International Bank	2010	-	13.53	0.813	0.27	0.092	0.138	0.333
Oromia International Bank	2011	34,200,000.00	16.9	0.724	0.321	0.103	0.167	0.315
Oromia International Bank	2012	33,290,560.00	17.73	0.725	0.371	0.083	0.138	0.316
Oromia International Bank	2013	57,784,570.00	18.64	0.725	0.358	0.083	0.125	0.291
Oromia International Bank	2014	115,280,718.00	19.58	0.695	0.403	0.08	0.117	0.295
Zemen Bank	2009	-	11.300	0.807	0.249	0.095	0.106	0.290
Zemen Bank	2010	25,000,000.00	13.53	0.813	0.27	0.092	0.138	0.333
Zemen Bank	2011	56,782,940.00	16.9	0.724	0.321	0.103	0.167	0.315
Zemen Bank	2012	75,080,803.00	17.73	0.725	0.371	0.083	0.138	0.316
Zemen Bank	2013	70,193,569.00	18.64	0.725	0.358	0.083	0.125	0.291
Zemen Bank	2014		19.58	0.695	0.403	0.08	0.117	0.295
Buna International Bank	2010		13.53	0.813	0.27	0.092	0.138	0.333
Buna International Bank	2011	14,153,877.00	16.9	0.724	0.321	0.103	0.167	0.315
Buna International Bank	2012	22,109,643.00	17.73	0.725	0.371	0.083	0.138	0.316
Buna International Bank	2013	37,070,630.00	18.64	0.725	0.358	0.083	0.125	0.291
Buna International Bank	2014		19.58	0.695	0.403	0.08	0.117	0.295
Berhan International Bank	2010	-	13.53	0.813	0.27	0.092	0.138	0.333
Berhan International Bank	2011	9,961,507.00	16.9	0.724	0.321	0.103	0.167	0.315
Berhan International Bank	2012	22,743,756.00	17.73	0.725	0.371	0.083	0.138	0.316
Berhan International Bank	2013	39,217,021.00	18.64	0.725	0.358	0.083	0.125	0.291
Berhan International Bank	2014	67,255,991.00	19.58	0.695	0.403	0.08	0.117	0.295