ቅድስት ማርያም ዩኒቨርስቲ

St. Mary's University, Ethiopia

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

THE EFFECT OF ADVERTISEMENT ON FINANCIAL PERFORMANCE OF ETHIOPIAN PRIVATE COMMERCIAL BANKS

BY

TAGEL SEBSIBE

ID No SGS/0264/2010A

JUNE, 2020

ADDIS ABABA, ETHIOPIA

THE EFFECT OF ADVERTISEMENT ON FINANCIAL PERFORMANCE OF ETHIOPIAN PRIVATE COMMERCIAL BANKS

BY
TAGEL SEBSIBE

A THESIS SUBMITTED TO ST.MARY'S UNIVERSITY, SCHOOL OF GRADUATE STUDIES IN PARTIAL FULFILLMEN OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION

JUNE, 2020
ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
FACULTY OF BUSINESS

THE EFFECT OF ADVERTISEMENT ON FINANCIAL PERFORMANCE OF ETHIOPIAN PRIVATE COMMERCIAL BANKS

BY

TAGEL SEBSIBE

APPROVED BY BOARD OF EXAMINERS

Dean, Graduate Studies	**Signature**
Advisor	**Signature**
External Examiner	**Signature**
Internal Examiner	**Signature**

DECLARATION

I Tagel Sebsibe, ID No SGS/0264/2010A 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.

Tagel Sebsibe	
Name	Signature

St. Mary's University, Addis Ababa **June, 2020**

ENDORSEMENT

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

Abraham G/G (Ass.Prof.) _____

Advisor

_____

Signature

St. Mary's University, Addis Ababa

June, 2020

Abstract

This study examines the effect of advertisement on financial performance of private commercial banks in Ethiopia with the presence of control variables: Capital Adequacy, Management Efficiency, Earning Ability and liquidity, by using unbalanced panel data of sixteen private commercial banks operating in Ethiopia over the period 2003-2017. Moreover, ROA, ROE and NIM were used to measure the financial performance. This paper used fixed effect least square method to estimate the impact of bank specific factors and detailed descriptive statistics and regression analysis has been used to evaluate the relationships between the bank specific variables and financial performance metrics. Based on the regression result; advertisement, management efficiency and earning ability have a significant effect on the financial performance of Ethiopian private commercial banks. Furthermore, the outcome of the result shows that advertisement has positive and statistically significant effect on private banks performance measured by ROA, ROE and NIM. The other control variable which is management efficiency has negative and statistically significant effect on the three financial performance indicators. Earning ability has positive and significant effect on net interest margin and has negative and significant effect on return on equity model. Thus, management bodies of commercial bank should give emphasis on the identified significant factors.

Key words: *Private Banks, Advertisement, Control variables, financial performance*

ACKNOWLEGEMENTS

First and foremost, I am very grateful to the Almighty God for helping me in every aspects of my life. I express my profound gratitude to my advisor, Abraham G/G (Ass. Prof.), for his constructive comments, valuable suggestions and good guidance.

My heartfelt gratitude goes to my beloved wife for her love, kindness and encouragement she gave me throughout my research work. Finally, I would also like to express my gratitude to all my families and friends who assisted me in diverse ways in the conduct of this study.

Table of contents

Description **Page No**

LIST OF TABLES Page

LIST OF FIGURES Page

List of Acronyms

NBE: - National Bank of Ethiopia

HP: - Hypothesis

ROA: - Return On Asset

ROE: -Return On Equity

NIM: - Net Interest Margin

EVA: - Economic Value Added

RAROC: - Risk Adjusted Return on Capital

GDP: - Gross Domestic Product

ADS: - Advertisement Expense

MGT: - Management Efficiency

CAD: - Capital Adequacy

ERN: - Earning Ability

LIQ: - Liquidity

CHAPTER ONE
INTRODUCTION

This chapter presents the general introduction of the research paper. It includes background of the study, statement of the problem and objectives of the study. It also provides a brief look into research hypothesis and significance of the study. The chapter moves on to scope and limitations of the study and ends with the organization of the thesis.

1.1. Background of the study

The financial sector plays an important role in the development of the economy and growth in any country. 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).

The financial system in Ethiopia, which is characterized as highly profitable, concentrated, and competitive, is dominated by banking Industry and it is also amongst the major under banked economy in the world. The development of a vibrant and active private banking system that complements with the existing public sector work is considered important to Ethiopia's economic progress (Zerayehuet. al. 2013).

The number of banks operating in the country by the end of 2015 reached a total of 19, of which 16 are private commercial banks. The number of bank branch networks and physical reach of the sector is increasing very fast. By 2015, this number reached a total of 2, 693, the public banks making about 42 per cent (the private banks share being 58 per cent).The total capital of the banking sector has also reached Birr 31.54 billion – the share of public and private banks being 43.5 and 56.5 percent, respectively (NBE, 2015).

The private commercial banks in Ethiopia as well operate in a relatively stringent domestic financial and economic policy and regulatory environment and anticipating potential threats of entry of highly efficient foreign banks. Moreover, the internal banking environment is getting momentum and competition becomes fiercer for resources and market position, getting upper returns from the allocated resources or investment remains not to be an easy task (World Bank, 2013). The existing domestic competitive environment, forces all commercial banks to improve their performance and stay in the market by raising their profitability.

Due to this fact the financial firms particularly banks are competing each other to obtain their target customers. Accordingly, most of the banks use advertisement as an important marketing tool and allocate huge amount of budget for advertisement to attract various customer groups and to attain better market share in this competitive finance sector.

In today's competitive market, Advertising helps firms to generate awareness among customers for their products and services. It also serves as a useful vehicle in promoting brand image for products and services offered in the target market. Moreover,

advertising can have a direct influence on firm performance through its impact on market value or generating high returns for the advertising firms. Similarly, advertising can also have an indirect influence on firm performance by virtue of its ability to influence sales and profitability of a firm (Srinivasan et. al.2009; Joshi et. al., 2010).

Many researchers have studied about the effect of advertisement on banks financial performance. In their study, they highlighted the financial performance of banks are positively and significantly affected by advertisement. But all these studies were conducted outside the country. Due to the absence of such a literature in the subject matter inspired to carry out the research. Consequently, the paper tried to explore the effect of advertisement on the performance of Ethiopian private commercial banks.

1.2. Statement of the Problem

Advertisement plays a very significant role in creating product or service awareness in the market place. David and James (1982) argued that advertisement is one easy way to educate existing and prospective consumers about a product or service. Although it is common for people to relate the performance of a company with the priority it gives to advertisement, people tend to forget that advertisement budgets are a huge source of costs for the organization. In fact, the amount of resources committed by firms to advertisement has steadily grown over the years because of the increased awareness and sophistication of consumers (Kotler, 2009).

Despite the fact that the advertisement budget of the commercial banking sector had grown over the years to constitute reasonable portion of expenditure for the banks, little

research attention has been paid to the effect of such advertisement costs on the financial performance of Ethiopian private commercial banks.

There are lots of studies that have been conducted in Ethiopia regarding the financial performance of commercial banks. (Mulalem, 2015), (Rahel&Maru, 2015) and (Ermias, 2016) evaluate determinants of financial performance of commercial banks in the country. In their study, bank specific factors such as capital adequacy, asset quality, liquidity, Management efficiency, earnings, loan to deposit ratio, income diversification, export, loan performance and deposit mobilization are considered as determinant variables of financial performance of commercial banks.

In addition to these, we found research papers about advertisement effectiveness, advertisement influence on brand choice decision and advertisement effect on consumer buying behavior (Eskinder, 2011), (Meweal, 2015) and (Meron, 2017). However, the effect of advertisement on financial performance is not yet examined. Therefore, this study attempts to examine the advertisement effect on financial performance of Ethiopian private commercial banks.

This particular study will overcome the deficiencies of the previous studies by intending to rise up to the current realities of advertisement effect on commercial banks performance, by utilizing the data from private commercial banks of Ethiopia.

1.3. Objectives of the study

1.3.1. General Objectives

The main objective of the study is to examine the effect of advertisement on the financial performance of Ethiopian private commercial banks.

1.3.2 Specific Objectives

The study seeks to achieve the following specific objectives;

- To assess the trend of advertisement in the Ethiopian private commercial banks.
- To investigate the relationship between advertisement and financial performance of private commercial banks in Ethiopia.
- To examine the effect of bank specific variables on financial performance of Ethiopian commercial banks.

1.4. Research Hypothesis

In line with the purpose statement, the following hypotheses were formulated for investigation. Hypotheses of the study stands on the theory are related to a bank's advertisement and its effect on bank's financial performance. Based on the objectives, the study seeks to test the following three hypotheses.

- HP1: Advertisement has positive and significant effect on ROA of private commercial banks.
- HP2: Advertisement has positive and significant effect on ROE of private commercial banks.

- ❖ HP3: Advertisement has positive and significant effect on interest margin of commercial banks.

1.5. Significance of the study

This study explains the effect of advertisement on the financial performance of private commercial banks in the country. The study findings will benefit shareholders, management and staff of commercial banks who will gain insight into how their institutions can effectively manage their advertisement. This study will offer an understanding on the effects of advertisement on the financial performance of the commercial banks.

The study provides background information to other researchers and scholars who may want to carry out further research in this area. The study facilitates individual researchers to identify gaps in the current research and carry out research in those areas. The work will also be used by academicians who will want to study similar area and to come up with comprehensive conclusion and reasoning in regard to advertisement and bank performance.

1.6. Scope of the study

This study is based on large secondary and small primary data. The secondary data is collected from all private commercial banks annual reports, basically reported to the public every year. In addition to that it is based on historical cost data and all the disclosures attached may not have all the required data in detail. The primary data is collected from six sampled banks.

1.7. Limitation of the study

The study included only bank specific variables. Furthermore, the primary data is collected through interviews from six banks only. This is due to not having sufficient time and budget to gather enough data from the other 10 banks.

1.8. Organization of the paper

The rest of the research organizes as follows. Chapter two presents theoretical and empirical literature review. Research design, approach to the research method, population, data source and collection method, data sampling, data analysis and model specification are included in chapter three. Chapter four presents the data analysis and interpretation of the results. Finally conclusion of the results and the recommendations suggested by the researcher in chapter five.

CHAPTER TWO
LITRATURE REVIEW

2.1. Advertisement Overview

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, guarantee services providing loans, 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 includes advertising, personal selling, sales promotion and public relations (Kotler, 2012).

Today, we all have strong concepts of what advertisement is, and we also tend to have very strong opinions and prejudices about it. Definitions of advertising are many and

varied. It may be defined as a communication process, a marketing process, an economic and social process, a public relations process, or an information and persuasion process, depending on the point of view. Advertising is the non-personal communication of information, usually paid for and usually persuasive in nature, about products, services, or ideas by identified sponsors through various media (Arens, 1996).

Advertisement is the use of paid-for space in a publication, for instance, or time on television, radio or cinema, usually as a means of persuading people to take a particular course of action, or to reach a point of view. It may also be taken to include posters and other outdoor advertising (Wilmshurst, 1985).

Advertising is related and begins with a base of creating awareness and strengthening a company's position or image. It is advertising that makes the companies known. It also create favorable climate for salespeople. In some instances, customers will order directly from the advertising, so the final purpose of advertising is to generate sales (Dwyer, and Tanner, 2002). In addition, they define mass media advertising as "non-personal, paid announcements by an identified sponsor to reach large audiences, create brand awareness, help position brands, and build brand images" (Dwyer and Tanner, 2002).

In today's market the range of products and services is especially large, they are all impossible to remember or purchase. The main goal of advertising a certain product or service is to attract the customer's attention and analyze the impact of advertising on the customers' behavior, which is determined by a number of cognitive, emotional and behavioral aspects. In the center of advertising is the customer, whose psychology is determined by numerous aspects and advertising itself, which aims at arousing the

customers wish to acquire the product advertised, and most importantly, at achieving the act of purchasing the product (Jakstien et al. 2008). All the efforts to make an advertisement are centered on the sole aim of making it so effective and persuasive in a natural way so as to serve the motto of meeting the consumer psyche in a positive manner (Rai, 2013).

For any business, advertising may perform a variety of functions when implemented correctly, and its effect may be dramatic. It helps to identify products and their sources and to differentiate them from others, and it communicates information about the products, its features, and its location of sale; it helps to try to induce new products and to suggest reuse. It can stimulate the distribution of products or services on local or global level (Arense, 2009). Advertising can help companit.al.es develop consumers' awareness to an unmet need or introduce a product that consumers may see as valuable. This influence is often present when new products enter the market. Customer awareness is often low for these items until companies promote them and attempt to drive customer demand through advertising (Dinu et al. 2012).

Advertising can also used to create images and symbolic appeals for products and services, a capability that is very important to companies that are selling products and Advertisements tend to be highly informative and present the customer with a number of important product attributes or features that will lead to favorable attitudes and can be used as the basis for a rational brand preference. People get information from the advertisement through the attractiveness it holds, the attention it creates and the awareness it gives (Arens, 1996). Advertising is also a type of communication. It is actually a very structured form of applied communication, employing both verbal and

non-verbal elements that are composed to fill specific space and time determined by sponsor. Effective communication through advertisement leads the consumers toward the purchasing of brand (Belch, 1998).

2.2. Bank Advertisement

Banks are needed to implement a well-organized advertising campaign for market development. The advertising is necessary for banks and provides elemental supports for banks. Advertising is fundamental key to long-term growth and provides organization at the contemporary business environment to have the capability to improve customer awareness of products to achieve demand. Competition in the banking sector is very fierce and banks need to updates the customer's mind about the attractive offers that are provided by a bank to customers (Ayres, 2015).

Storey (2013) explained that banks are always to provide lots of financial information relating to banks performance through advertising to enable stakeholders of banks to get all facts relating to current bank operations. Banks implement advertising to inform stakeholders with information related to bank performance every year and to enable stakeholders to be aware of the effective performance of the bank. Banks should declare also the annual reports related to bank performance every year to public people as per local regulations relating to banks.

Advertisements enable banks to improve a large number of people’s awareness about the quality of services that are provided by a bank to attract more people to deal with the bank and to gain people trust of the bank operations. Advertising supports banks to make more customers to be conscious of all bank services and enable banks to make

people aware of bank packages of services. Bank brand can be more familiar to a larger number of people in the banking sector by advertising. Banks need always to perform wide advertising relating to bank offers and to provide customers with all facts that make customers to have the satisfaction of bank performance to attract the to deal with the bank (Sisson, 2015).

Henderson (2014) explained, advertisements support banks in competition with other banks and to have better opportunities to raise bank market-share by attracting customers of other banking through an advertising campaign. Advertisements had a strong role to support banks to expand effectively in the banking sector and to enable customers to get higher awareness of overall bank offers and bank products. The advertisements make possible for banks to gain more profit through the positive roles of advertising to attract a superior number of customers and to encourage them to take decision to deal with the bank. Advertisements enable banks to target specific segmentation of customers and to focus advertising efforts to make an exact segment of bank customers to be aware of bank offer. Advertisements enable bank to send a specific message to bank customers and to attract customer's attention to bank offers to gain higher customer's trust.

Schuler (2015) state that advertisements attract customers to decide to deal with the bank due to the role of advertising to support customers to get vital facts reeling to overall bank operations and bank history to lead our customers to decide to deal with bank and to open their account in bank. Advertisements provide banks with strong brand name and remind customers about the performance of bank and range of services that are provided by banks to people in the banking sector. Advertisements

support banks for long-term growth and enable to attract more customers and to create strong relationships with current customers of banks.

Banking advertisement depends on a bank's target group. Most banking institutions address their advertising to holders of small accounts and thus advertise their products and services through the mass media. The press and television are the preferred means for larger banks. Advertisements on investment programs usually appear in the trade press, while investment programs appear in almost all wide circulation newspapers as they are addressed to small investors. Many banking institutions rent space in several exhibitions and print information brochures to describe their activities and services (Myola, 2008).

In recent years the role of advertising in the banking industry in both personal and corporate markets has expanded dramatically and the financial services industry is now one of advertising revenue. In developing adverting strategy, the bank must first ensure that it conforms to overall marketing strategy (Channon, 2015).

2.3. Bank Performance and Measurement

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 (Ongore,2013). 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 (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. 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, 2015).

Bank performance is viewed in terms of its capacity to generate sustainable profit. Profitability is a bank's first line of defense against unexpected losses, as it strengthens its capital position and improves future profitability through the investment of retained earnings. An institution that persistently makes a loss will ultimately deplete its capital base, which in turn puts equity and debt holders at risk. Moreover, since the ultimate purpose of any profit seeking organization is to preserve and create wealth for its owners, the bank's return on equity (ROE) needs to be greater than its cost of equity in order to create shareholder value (European central bank, 2010).

Although banking institutions have become increasingly complex, the key drivers of theirperformanceremainearnings, efficiency, risk-taking and leverage. In detail: while it is clear that a bank must be able to generate "earnings", it is also important to take account of the composition and volatility of those earnings. "Efficiency" refers to the bank's ability to generate revenue from a given amount of assets and to make profit from a given source of income. "Risk-taking" is reflected in the necessary adjustments to earnings for the undertaken risks to generate them (e.g. credit-risk cost over the cycle). "Leverage" might improve results in the upswing in the way it functions as a multiplier. But, conversely, it can also make it more likely for a bank to fail, due to rare, unexpected losses (European central bank, 2010).

When we come to bank performance measurement, there are a multitude of measures used to assess bank performance. Among the large set of performance measures for banks used by academics and practitioners alike, a distinction can be made between

traditional, economic and market-based measures of performance. Traditional performance measures are similar to those applied in other industries, with return on assets (ROA), return on equity (ROE) and In addition the importance of the intermediation function for banks, net interest margin (NIM) is also used.

2.3.1. Return on assets (ROA)

Return on assets reflects the ability of a bank's management to generate profits from the bank's assets. It shows the profits earned per birr of assets and indicates how effectively the bank's assets are managed to generate revenues. Although it might be biased due to off-balance-sheet activities, Investors and managers often are more interested in the profits earned on capital invested than in the level of profits as a percentage of sales. Companies operating in capital-intensive industries often have attractive profit margins but are often less inspiring when the amount of capital absorbed is considered. Therefore it is useful to examine both the level of and the trend in the company's operating profits as a percentage of total assets. In order to improve the comparisons with other companies, and over time, it is useful to use earnings before interest after tax (EBIAT). This allows one to focus on the profitability of operations without any of the effects of the way in which the assets are financed (Mark & Rory, 2001).

2.3.2. Return on Equity (ROE)

Return on Equity measures the Profitability of equity funds invested in the bank it shows the profit earned per birr of capital invested. It regarded as a very important measure because it reflects the productivity of the ownership (or risk) capital employed in the bank. It is also an internal performance measure of shareholder value, and it is by far the

most popular measure of performance, since: (i) it proposes a direct assessment of the financial return of a shareholder's investment; (ii) it is easily available for analysts, only relying upon public information; and (iii) it allows for comparison between different companies or different sectors of the economy.

2.3.3. Net Interest Margin (NIM)

This indicator focuses on the profit earned on lending, investing and funding activities. It reflects the cost of bank intermediation services and the efficiency of the bank. The higher the net interest margin, the higher the bank's profit and the more stable the bank is. However, a higher net interest margin could reflect riskier lending practices associated with substantial loan loss provisions.Net interest margin measures the gap between the interest income the bank receives on loans and advances and interest cost of its borrowed funds. It reflects the cost of bank intermediation services and the efficiency of the bank (Khrawish, 2011).

The economic measures of performance take into account the development of shareholder value creation and aim at assessing, for any given fiscal year, the economic results generated by a company from its economic assets (as part of its balance sheet). These measures mainly focus on efficiency as a central element of performance, but generally have high levels of information requirements. Two sets of indicators can then be identified amongst economic measures of performance are economic value added (EVA) and risk-adjusted return on capital (RAROC).

2.3.4. Economic value added (EVA)

Developed by (Stern and Stewart, 1991) EVA takes into account the opportunity cost for stockholders to hold equity in a bank, measuring whether a company generates an economic rate of return higher than the cost of invested capital in order to increase the market value of the company.

2.3.5. Risk-adjusted return on capital (RAROC)

According to Kimball (1998) for a bank to be successful in its operations, managers must weigh complex trade-off between growth, return and risk, favoring the adoption of risk-adjusted metrics. Risk-adjusted return on capital allows banks to allocate capital to individual business units according to their individual business risk. As a performance evaluation tool, it then assigns capital to business units based on their anticipated economic value added. The theoretical RAROC can be extracted from the one-factor CAPM as the excess return on the market per unit of market risk (the market price of risk).

This measure shares in common with the EVA that it takes into account the bank's cost of capital. But RAROC goes further because it adjusts the value-added in relation to the capital needed. However, literature is quite critical of this measure as a tool to analyze performance, essentially due to its thorough accounting basis, while it is then difficult to calculate RAROC without having access to internal data. Furthermore, it appears that RAROC may be appropriate for activities with robust techniques for measuring statistical risk, such as credit activity. On the contrary it may be less relevant for market activities, given that the value-at-risk (VAR) is still a very imperfect measurement of risk.

Market-based measures of performance characterize the way the capital markets value the activity of any given company, compared with its estimated accounting or economic value. The most commonly used metrics includes,

Total share return (TSR): The ratio of dividends and increase of the stock value over the market stock price.

Price-earnings ratio (P/E): A ratio of the financial results of the company over its share price.

Price-to-book value (P/B): This relates the market value of stockholders' equity to its book value.

2.4. Empirical Literature Review

Regarding earlier related studies, many researches' have been carried out on the subject. In this section, a few of the related studies carried out will be reviewed.

2.4.1. Advertisement and financial performance

Merve et al. (2017) evaluated Advertising effectiveness on financial performance of banking sector in Turkey. The study highlighted the financial performance of banks are positively and significantly affected by advertisement. Besides its positive effect on profitability of banking sector, the results also demonstrate the long-term benefits of advertising on financial performance. This result also brings the accounting and amortization policy about advertising expenses on mind. The study provides a basis for detecting that to what extent advertising expenses have long-term benefits. The results show a positive effect of advertising on financial performance that extends over time.

Therefore, the paper suggest with some confidence that advertising expenses should be capitalized and then amortized rather than being treated as an immediate cost with occurrence.

Riaz et al. (2015) pointed out advertisement has a positive and significant impact on the profitability of private banks of Pakistan. This paper further suggests that bank managers may apply latest techniques of brand image, brand awareness and advertisements to gain competitive edge and satisfy their customers. The study also highlighted the role of marketing is viewed as extremely vital to be successful in the financial services industry, especially the banking industry where a number of similar options of products and services are available to the customers and they make the final decision based on primarily intangibles.

Hadiza (2014) examined the impact of advertising and promotion on Financial Performance of Banks: A Study of First Bank of Nigeria PLC. The paper found that there is a positive significant relationship between marketing communication methods advertising and promotion on financial performance as measured by ROA. The study recommends advertising and promotion should be sustained and encouraged so that the banks will not only improve financially but operationally.

The roll of advertising in commercial banking, a study conducted by (Ors, 2003). The results of the paper suggest that advertising plays a significant role in banking sector. An increase in advertising appears to lead to an increase in profitability.

Chowdhury (2017) investigates the relationship among the advertisement expenditure, Sales Revenue and Profit on banking Industries in Bangladesh. The research paper found that there are positive, linear &cyclical relationship among the variables such represent the increasing advertising expenditure leads to increasing sales and profit and vice versa. It is also noted that increased net profit leads to next year more advertising expenditure which generate more revenue and net profit of next year.

2.4.2. Bank specific determinants of financial performance

In the Ethiopian case, numbers of researches have been conducted to scrutinize the determinants of financial performance in Ethiopian commercial banks. Among the many researches, it is worthy to mention some few studies:

Mulalem (2015) evaluated the financial performance of commercial banks by considering five independent variables; capital adequacy, asset quality, management efficiency, earning ability and liquidity. The study revealed asset quality ratio, Management efficiency, earning ability and liquidity are the key driver of return on asset of commercial banks in Ethiopia. Similarly the study also identified capital strength, management efficiency, earning ability and Liquidity as the key drivers of return on equity of Ethiopian Commercial banks.

Rahel & Maru (2015) examined determinants of financial performance of private commercial banks. The study examined only internal factors such as capital adequacy, loan to deposit ratio, income diversification, operating efficiency, export, liquidity, loan performance and deposit mobilization as explanatory variables. Return on Asset, Return on Equity and Net Interest Margin were used as dependent variables to measure the financial performance of the bank. The finding of the study revealed that income

diversification, deposit amount, export level and loan performance have a significant influence on the financial performance of Banks.

Ermias (2016) investigated the effects of internal determinants of profitability of six senior private Ethiopian commercial banks. The study examined internal factors such as capital adequacy, asset quality, management efficiency, earning quality, and liquidity management as important factors in determining the profitability of private commercial banks in Ethiopia. The findings also revealed that capital adequacy, asset quality, management efficiency, earning quality, are the major significant determinants of the profitability of the senior private commercial banks. The results also confirmed that improvement in capital strength, asset quality, management efficiency, and earning quality leads to higher profits.

A research paper by (Habtamu, 2013) evaluated the financial performance of the Ethiopian Banking sector. The financial performance of the Ethiopian Banks has been evaluated using the volume of deposit, bank assets, loan-deposit ratio /LDR/, ROE, ROA. Therefore, a sample of seven commercial banks was selected using simple random sampling technique. The result of the study indicates the Ethiopian banking sector in general, as measured by volume of deposits, granting of loan and possession of assets has also shown a persistent increase throughout the study periods. Moreover, the profitability of the banks during the study periods in particular, and the sector in general presented a tremendous improvement.

2.4.3. Macro factors of financial performance

The macro determinants of financial performance in the country are studied along with the bank specific variables. Few studies are presented below.

Tigist (2014) examined the determinants of financial performance of commercial banks in Ethiopia. Under this study, both internal and external factors were included. The internal factors used in this study include capital structure; Income Diversification, operating cost and bank size whereas the external factors are effective tax rate, real GDP growth and inflation. Moreover, ROA and NIM were used as the performance measure. Based on the regression result, all bank specific variables except bank size affect performance of the bank significantly but negatively. However, bank size affects performance significantly and positively. In addition to this, macro-economic factors have no significant effect on the performance of banks except the tax rate which negatively but significantly affects ROA.

Tesfaye (2013) examined determinants of financial performance of commercial banks. The study was carried out to empirically explore the bank specific, industry specific and macroeconomic determinants of Ethiopian commercial banks' performance. The study used three indicators of profitability as dependent variables: Return on Asset (ROA), Return on Equity (ROE) and Net Interest Margin (NIM) and ten explanatory variables: Bank Size, Capital adequacy, Operational efficiency, Liquidity risk, Income Diversification, and Loan to Deposit Ratio from bank specific factors, Bank Concentration and Size Bank System from industry specific factors and Real GDP Growth rate and Annual Inflation Rate from macroeconomic factors.

The empirical result revealed that all bank specific factors except Loan to Deposit Ratio are statistically significant in determining profitability of Ethiopian commercial banks. Among them Cost Income Ratio and Liquidity negatively affect bank performance. There are also significant associations between Concentration and Size Bank System with profitability. However, no evidence is found about the relation between macroeconomic factors and performance of banks. In general, the overall empirical findings provide evidence that the profitability of Ethiopian commercial banks are mainly dominated by bank-specific factors which are on the hands of the management of the banks. So, the study suggests to the banks' managers and policy makers to give high concern on the internal factors of profitability and set direction to manage the most dominant factors of performance.

Dawit (2016) investigate determinants of financial performance of commercial banks. The study examines the determinants of financial performance of commercial banks in Ethiopia. Under this study, both internal and external factors were included. The internal factors used in this study include capital adequacy, Asset quality, Earning ability, liquidity management and Bank size whereas, the external factor is foreign exchange rate. Moreover, ROA, ROE and NIM were used to measure the financial performance. Based on the regression result; asset quality, earning ability and bank size have a significant influence on the financial performance of Ethiopian commercial banks measured by return on asset , return on equity and net interest margin. Thus, management bodies of commercial bank should strive to strengthen the identified significant factors.

Tewodros (2019) evaluate determinants of financial performance. The objective of the study is to empirically assess the effect of bank-specific and macroeconomic determinants of Ethiopian private commercial banks financial performance using three measures namely, return on assets (ROA), return on equity (ROE) and economic value

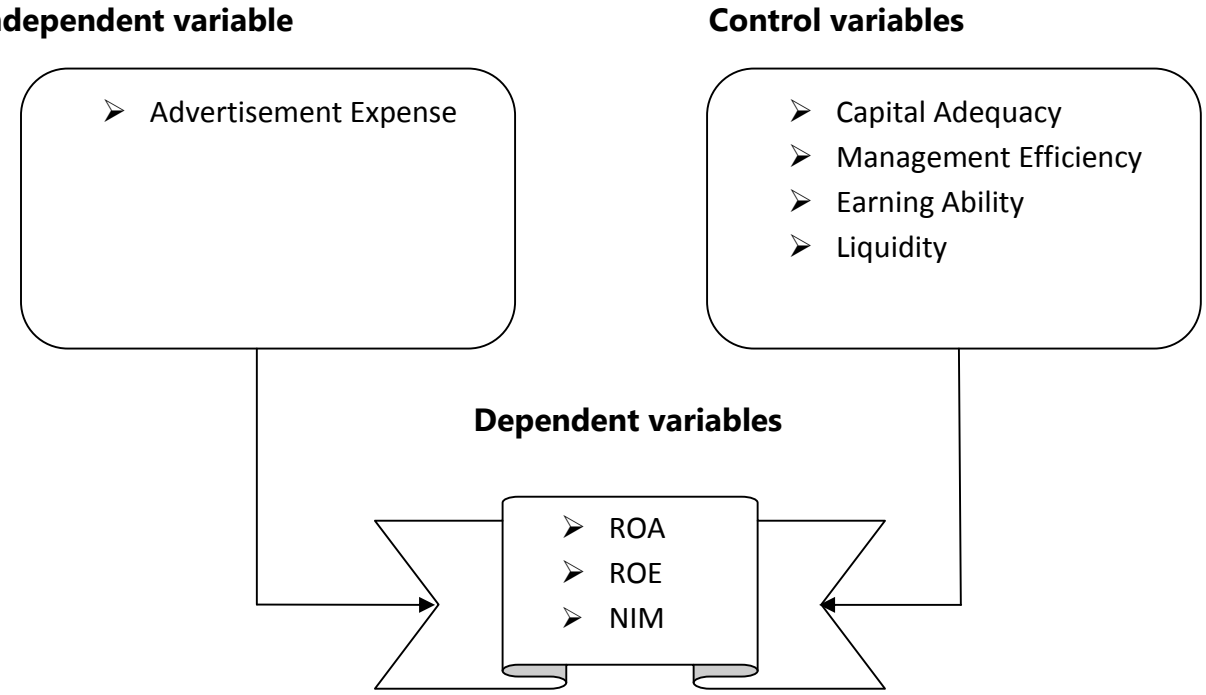
added (EVA) for the period 2006 to 2015 by using multiple regression on a sample of seven private commercial banks. The results indicated that performance persists to some extent, indicating the existence of relatively fair competitive market in private commercial banking environment. Regarding the explanatory variables from bank-specific determinants, Capital adequacy (CAP) has a significant and positive relation with ROA and significant and negative relation with ROE and EVA. In addition, ASQ has a significant and negative relation with ROA and insignificant and negative relation with ROE and EVA. Whereas ME affect bank performance (ROA, ROE and EVA) significantly and negatively. On the other hand, LIQ and BS affect bank performance (ROA, ROE and EVA) significantly and positively. Furthermore, GDP has an outsized positive and significant effect on both ROE and EVA but an insignificant effect on ROA. Therefore, Ethiopian commercial banks policy makers and managers should give high emphasis on CAP, ASQ, ME, LIQ, BS and GDP as these were found to have significant effect on private commercial banks financial performance.

2.5. Knowledge Gap

From the review of the relevant literature relating to the effect of advertisement on the financial performance of banks, it's possible to see the existence of knowledge gap. Even though, studies were undertaken by different researchers at different time in the country, most of the studies failed to examine advertisement effect on financial performance. Therefore, it’s demanding to conduct the research to fill this knowledge gap. Besides, the growth and development of the Ethiopian banking industry in terms of number of commercial banks, branch network, the ever increasing of advertisement budget and continuously reporting profits of different magnitude necessitate to examine the effect of advertisement on the financial performance in Ethiopian private banking industry.

2.6. Conceptual Framework

Based on the insights gained from review of the literature, the following conceptual framework showing the relationship between independent variable, control variables and dependent variables was created. The conceptual framework was developed consistent with objectives and hypotheses of the research.



Source: Adopted from the literature

CHAPTER THREE
METHODOLOGY

In this chapter, the researcher concentrates on the methods that were adopted throughout the study to accomplish the research objectives. It includes the research design and approach adopted to examine the effect of advertisement on financial performance, population used and the sampling design employed to collect the data, the methods employed to analyze the data and the model specifications.

3.1. Research Design

Research designs are plans and the procedures for research that span from broad assumptions to detailed methods of data collection and analysis. Research design usually refers to the blue print of the research (Creswell, 2009).The research design employed in this paper was explanatory type of research design. Explanatory research design enables researchers to identify the relationship that exists between the independent variables and the dependent variables 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).

Under this study, panel data from the year 2003-2017 G.C was used. The collected data was analyzed by using E-views 9. A multiple linear regression model is used to determine the relative importance of each explanatory variable in affecting the performance of banks.

3.2. Approaches to the Research Methods

The type of research approach employed in this study was quantitative and qualitative research method. Mixed research methods is a methodology for conducting research that involves collecting, analyzing, and integrating quantitative and qualitative research in a single study. The purpose of this form of research is that both qualitative and quantitative research, in combination, provide a better understanding of a research issue than either research approach alone(Creswell, 2009).Even though, the study uses more of quantitative data, the rational for incorporating a qualitative component into the study is to fill the gap that the study couldn't cover by simply assessing secondary data. Therefore, this study used quantitative and qualitative research approach to examine the stated objectives.

3.3. Population

The target population in this research was all private Commercial Banks of Ethiopia residing in Addis Ababa. To get comparable data and to make sound conclusion, only private banks are included in the study. Currently there are sixteen private commercial banks operating in the country.

3.4 Data sampling

This study includes all private commercial banks operating in Ethiopia as a population for quantitative data analysis. Out of the total sixteen private commercial banks, for the use of qualitative data analysis, only six private commercial banks were selected for the purpose of the study (purposive sampling) this is due to not having sufficient time to collect data from the remaining banks and at the time of data collection, most of the

banks were not willing to respond the expected time. The sampled banks are selected based on year of establishment. Those banks operated in the industry more than ten years, categorized as senior banks. Medium banks are those banks operated in the industry more than five years. Banks operated in the industry less than five years classified as small or recently established banks. Out of the selected six commercial banks, two are senior commercial banks, the other two are medium aged banks and the last two banks are recently established banks. Since these representative banks are included in the study, it's possible to make a sound conclusion from the collected data.

3.5. Data Source and Collection Methods

Both primary and secondary data collection methods were employed. As the research approach employed qualitative and quantitative method, it is worthy to conduct primary data collection technique i.e. interview, to fulfill the qualitative aspect of the study and perform structured document review to accomplish the quantitative part of the research. To gather primary data, semi structured interview was conducted with the concerned employees who are very proximate to the respective banks' management so as to assess the level of awareness about advertisement and its real practice in the Ethiopian private commercial banks. Secondary data for the bank specific factor was obtained from audited financial statements, i.e. from balance sheet, income statement and related disclosure of the respective banks. Thus, the data for the bank specific factor was collected from National Bank of Ethiopia (NBE) and from the respective commercial banks. The study included all private commercial banks, those operating in the industry. Consequently, this study used unbalanced panel data of all private commercial banks for fifteen years. Out of the **16** banks, 6 banks have 15 years data, 2 banks=10 years, 2

banks=9 years, 2 banks=8 years, 1 bank=7 years, 1 bank=6 years and 2 banks have 4 years data (165 observations).

3.6. Data Analysis

The objective of this study is to examine the effect of advertisement on financial performance of private commercial banks in Ethiopia. To achieve this objective, the study used panel data of sixteen banks for fifteen years. The researcher used panel data because by combining time series of cross section observations, panel data give more informative data, more variability, less collinearity among variables, more degrees of freedom and more efficiency (Gujarati,2004).

By using E-views version 9, the collected panel data was analyzed and descriptive statistics, correlation matrix and multiple regressions output is provided. In case of the descriptive statistics, the mean, standard deviation, maximum and minimum values were used to analyze the trends of the data while the correlation matrix was used to show the relationship exist between the variables used in the study. Moreover, the diagnostic tests were undertaken in order to check the validity of the model and fulfill the assumption of the Classical Linear Regression Model.

Furthermore, the panel data regression analysis model used in the study is either fixed effect model or random effect model. Fixed effects model is assumed to vary non-stochastically over each entity and time. There are unique attributes of individuals which do not vary across time and is correlated with independent variables. Summarily, we can conclude that in a fixed effect models, the parameters of the model are fixed alternatively, the group means are fixed. The fixed effect model can be estimated with

the aid of dummy variables. Whereas, Random effect model allows for heterogeneity and is also time invariant but the individual specific effect is uncorrelated with the independent variables. It can also refer to as a kind of hierarchical linear model which adopts the assumption of data being drawn from a hierarchy of different populations whose differences relates to that hierarchy.

When we compare the two models, it is often said that the random effects model is more appropriate when the entities in the sample can be thought of as having been randomly selected from the population, but a fixed effect model is more plausible when the entities in the sample effectively constitute the entire population. The random effects model should produce more efficient estimation than the fixed effects approach. However, the random effects approach has a major drawback which arises from the fact that it is valid only when the composite error term is uncorrelated with all of the explanatory variables. If they are uncorrelated, a random effects approach can be used; otherwise the fixed effects model is preferable (Brooks, 2014). However, to select proper model, Hausman specifications test (1978) guides the choice of the appropriate panel data model either fixed affects model or Random effects model after testing the data.

3.7. Model Specification

This study used explanatory variable advertisement expense along with control variables such as, capital adequacy, management efficiency, earning ability and liquidity.While the dependent variables are ROA, ROE and NIM. In this study, panel data was used. As noted in Brooks (2008), a panel keeps the same individuals or objects and measures some quantity about them overtime. The regression model for the panel data is described in the following equation as adopted from Brooks (2008).

$Y_{it} = a + BX_{it} + \varepsilon_{it}$

Where:

Y_{it} *= is the dependent variable*

a *= is the intercept term*

B *= is a Kx1 vector of parameters to be estimated on the explanatory variables*

X_{it} *= is a 1xK vector of observations on the explanatory variables, t=1,...,T;i= 1,...,N.*

ε_{it} *=the error term.*

In this study, the financial performance of the bank is measured using the ROA, ROE and NIM. The bank specific variable of the study is advertisement expenditures together with control variables; capital adequacy, management efficiency, earning and liquidity.

The model used in this study was as follows;

Model 1 is used to test the relationship between independent variable, control variables and ROA:

$ROA_{it} = a + B_1(Ads)_{it} + B_2(Cad)_{it} + B_3(Mgt)_{it} + B_4(Ern)_{it} + B_5(Liq)_{it} + \varepsilon_{it}$

Model 2 is used to test the relationship between independent variable, control variables and ROE:

$ROE_{it} = a + B_1(Ads)_{it} + B_2(Cad)_{it} + B_3(Mgt)_{it} + B_4(Ern)_{it} + B_5(Liq)_{it} + \varepsilon_{it}$

Model 3 is used to test the relationship between independent variable, control variables and NIM:

$NIM_{it} = a + B_1(Ads)_{it} + B_2(Cad)_{it} + B_3(Mgt)_{it} + B_4(Ern)_{it} + B_5(Liq)_{it} + \varepsilon_{it}$

Where;

ROA_{it} = *Return on Asset of bank i at time t*

ROE_{it} = *Return on Equity of bank i at time t*

NIM_{it} = *Net interest Margin of bank i at time t*

Ads_{it} = *Advertisement expense of bank i at time t*

Cad_{it} = *Capital adequacy of bank i at time t*

Mgt_{it} = *Management efficiency of bank i at time t*

Ern_{it} = *Earnings ratio of bank i at time t*

Liq_{it} = *Liquidity ratio of bank i at time t*

B1-B5 = Coefficient parameters

ε_{it}= *Error term where i cross sectional and t is time identifier*

3.8. Model Assumptions

The following diagnostic tests were carried in order to ensure the data is in conformity with the basic assumptions of classical linear regression model (Brooks, 2008).

- Normality test: (To check for normality, i.e., kurtosis and skewness of the distribution of the data will be examined) descriptive statistics were used.
- Multicollinearity (To check whether there is a strong correlation among the independent variables exists or not)
- Auto correlation (To check whether there exists a serial relationship in the error terms)
- Heteroscedasticity (To detect the problem of heteroscedasticity of disturbance terms.

3.9. Description of Variables

3.9.1. Dependent Variables

Bank performance is usually measured by ROA, ROE or NIM. Studies conducted on the financial performance of banks use one or a combination of these ratios as a measure of performance in their analysis. According to Mohana *et al.* (2012), the choice of the financial performance ratios (ROA, ROE, NIM) depends on the objective of the performance measure since the output of each of the performance measure differs.

3.9.1.1. Return on Asset

The ROA reflects the ability of a bank's management to generate profits from the bank's assets. It shows the profits earned per birr of assets and indicates how effectively the bank's assets are managed to generate revenues. Although it might be biased due to off balance sheet activities, this is probably the most important single ratio in comparing the efficiency and operating performance of banks as it indicates the returns generated from the assets that bank owns (Tan *et al.* 2012). ROA is the most comprehensive accounting measure of a bank's overall performance (Birhanu, 2012). Because of this, the bulk of studies employed ROA as performance measure, for instance (Mohana *et al. 2012,* Li Yuqi, 2006). ROA can be calculated as:

$$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$$

3.9.1.2. Return on Equity

It is a financial ratio that refers to how much profit acompany earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a higher ROE is considered to have better position in terms of profit generation. It is further explained byKhrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital.ROE can be calculated as:

$$ROE = \frac{\text{Net Income}}{\text{Total equity capital}}$$

3.9.1.3. Net Interest Margin

Net Interest Margin is defined as the difference between the interest income less interest expense divided by total loan and advances. According to Okoth et al. (2013), NIM reflects the cost of banks intermediation services and the efficiency of the bank. The higher the net interest margin, the higher the profit earned by the bank and the more stable the bank is. However, according to Khrawish (2011) a higher NIM could reflect riskier lending practices associated with substantial loan loss provisions. NIM can be calculated as:

$$NIM = \frac{\text{Net Interest Income}}{\text{Total Loan \& Advances}}$$

3.9.2. Independent Variable

The only independent variable to test in this study was advertisement expense. It is calculated as a natural logarithm of advertisement expense.

3.9.3. Control Variables

The control variables used in this study are:

- **Capital Adequacy**: A bank's capital is one of the bank specific factors that influence the level of bank profitability. Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs and that greater bank capital reduces the chance of distress (Diamond, 2000). According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. Hence, total capital to total asset ratio (CAR) is considered for this particular study.

- **Management Efficiency:** Management efficiency is one of the key internal factors that determine the bank profitability. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. Yet, it is one of the complexes subject to capture with financial ratios. Moreover, operational efficiency in managing the operating expenses is another dimension for management quality. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. Yet, some

financial ratios of the financial statements act as a proxy for management efficiency.

However, management efficiency is measured through cost to income ratio. Cost to Income Ratio (CIR) reflect bank's operational efficiency and it is defined as non interest costs (operating cost, such as administrative costs, staff salaries and property costs excluding bad debts and doubtful expenses) divided by total of interest income and non-interest income (Dietricha&Wanzenried, 2009). CIR used as an indicator of management's ability to control costs and is expected to have a negative relation with profits, since improved management of these expenses will increase efficiency and therefore raise profits (Guru *et al.*, 2002).

- **Earning Ability:** Consistent profit not only builds the public confidence in the bank but absorbs loan losses and provides sufficient provisions. It is also necessary for a balanced financial structure and helps provide shareholder reward. Thus consistently healthy earnings are essential to the sustainability of banking institutions (Grier, 2007). It primarily determines the profitability of a bank and explains its sustainability and growth. Interest income to total income ratio is considered to check the earning ability (Anteneh, 2018).

- **Liquidity:** Liquidity indicates the ability of the bank to meet its financial obligation. A lot of approaches are there in the literature to address liquidity ratio in banks, however, Liquid Assets to total deposit ratio (LADP) has been considered so as to comply with the regulatory organ (Tesfaye, 2014).

CHAPTER FOUR
RESULTS AND DESCUSSIONS

This chapter presents results and discussions of the study. The data were analyzed by using E-views software version 9. Results from the estimation of the effect of advertisement on bank performance are presented in this chapter. The empirical analysis used in this study covers unbalanced panel data for 16 private commercial banks in Ethiopia from the period 2003-2017. The chapter included the basic parts of descriptive analysis, econometric analysis and results of interview questions.

Table 4.1: Descriptive statistics

	ROA	ROE	NIM	MGT	ERN	CAD	LOG(ADS)	LIQ
Mean	4.29	21.88	6.55	42.72	58.18	15.16	15.038	45.74
Maximum	6.37	35.67	10.19	74.54	79.78	38.24	17.340	61.28
Minimum	3.99	14.87	0.71	22.45	23.31	6.43	12.256	16.61
Std. Dev.	1.39	8.17	1.86	21.74	11.11	5.46	1.0242	17.81
observation	165	165	165	165	165	165	165	165

Source: Secondary data (2020)

4.1. Summary statistics and description

Return on asset measured as a ratio of net income to total asset has a mean value of 4.29 percent, which means on average Ethiopia's private commercial banks get net income of 4.29 percent from the total of their assets. The maximum and minimum value of net income as percentage of total asset is 6.37 and 3.99 percent respectively with standard deviation of 1.39. The mean value of return on equity which is computed as a ratio of net income to total equity capital is 21.88 percent with maximum and minimum value of 35.67 and 14.87 percent respectively. Its standard deviation is 8.17 which

relatively high showing higher variation from its mean. For the study sample the mean value of net interest margin is 6.55 with minimum and maximum of 0.71 and 10.19 percent respectively. That means on average net interest income of banks is 6.55 percent of total loan and advances. Moreover the maximum share of net interest income from total loan and advance is 10.25 percent. The variation measured by standard error is 1.86, which shows low variation from its mean value.

The mean value of Management efficiency measured by the ratio of cost to income is 42.71 percent with a range of 22.45 to 74.54 percent moreover the standard error is higher, which is 21.74 showing greater variation from its mean value. For the study sample the maximum share of costs from total income (74.54 percent) shows inefficiency of the banks. Advertisement expenditure (natural logarithm form) is one of the important variables which may affect the performance of banks. Its mean value is 15.04 with maximum and minimum of 17.34 and 12.26 respectively. Its standard error is 1.024, which is relatively lower showing us lower variation from its mean value.

Another independent variable liquidity measured as the ratio of liquid asset to total deposit has a mean value of 45.74 percent i.e. from the total deposits of private banks on average 45.74percent is hold as liquid assets. The minimum share of liquid asset from total deposit of private banks during the study sample is 16.61 percent and the maximum is 61.28 percent. Standard error is 17.81, which shows greater variation from its mean. For the study sample period and cross sections used in this study Earning Ability measured by interest income to total income ratio has a mean value of 58.18, which indicates 58.18 percent of total income is interest income from loan. Higher interest income indicates the amount of loans is large, which may be used for

productive investment and used as an engine for the growth of country's economy. The maximum share of interest income from total income is 79.78 percent, indicating us banks source of income is interest income or interest premium (lending interest rate minus saving interest rate). The minimum share is 23.31 percent with standard deviation of 11.11, which shows higher variation from the mean value. Finally capital adequacy measured by the ratio of total capital to total asset has a mean value of 15.16 percent. It shows the share of total capital is very low. The maximum and minimum value of capital adequacy is 38.24and 6.43 percent of total asset respectively with the standard deviation of 5.46.

4.2. Pre- Estimation tests

4.2.1. Model specification test

Before interpreting the estimation result of panel data regression model one should select the appropriate model i.e. random or fixed effect model. To identify the appropriate model, correlated random effect- Hausman test was conducted. The test is performed based on the null hypothesis that random effect model is appropriate. While alternate hypothesis is fixed effect model is appropriate. The decision is if the probability value is less than 5 % reject Ho i.e. fixed effect model is appropriate. For the first model (return on asset) the probability value is 0.0000, which is less than 0.05. Thus we reject null hypothesis and accept alternate hypothesis i.e. fixed effect model is the appropriate model. Correlated Random Effects - Hausman Test statistics is reported on below table 4.3. Like return on asset model for the second model probability value of Correlated Random Effects - Hausman Test is 0.0034, which confirms fixed effect model is appropriate. Cross-section random effects test comparison table is reported on table 4.4. For the third model the correlated random effects Huasman test statistics show that the probability value of 0.001, which is lower than 5 percent. As a result we reject Null

hypothesis of random effect model i.e. fixed effect model is appropriate. The test statistics value is reported on below.

Table 4.2 Correlated Random Effects - Hausman Test for return on asset model

Correlated Random Effects - Hausman Test

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	35.089651	5	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(ADS)	0.297942	0.266334	0.000120	0.0039
CAD	-0.011204	0.029262	0.000076	0.0000
LIQ	-0.007206	-0.012910	0.000004	0.0039
MGT	-0.050359	-0.054178	0.000001	0.0002
ERN	-0.005969	-0.015133	0.000012	0.0085

Table 4.3 Correlated Random Effects - Hausman Test for return on equity

Correlated Random Effects - Hausman Test

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	17.682113	5	0.0034

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(ADS)	0.707792	0.500946	0.008390	0.0239
CAD	-0.693467	-0.441974	0.006507	0.0018
LIQ	-0.035919	-0.073351	0.000319	0.0362
MGT	-0.129900	-0.159341	0.000076	0.0007
ERN	-0.184624	-0.223241	0.000933	0.2061

Table 4.4: Correlated Random Effects - Hausman Test for net interest margin model

Correlated Random Effects - Hausman Test

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.420962	5	0.0010

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(ADS)	0.675992	0.668686	0.000151	0.5516
CAD	0.033054	0.051372	0.000128	0.1054
LIQ	-0.007200	-0.007474	0.000006	0.9120
MGT	-0.028362	-0.028570	0.000001	0.8573
ERN	0.057114	0.057892	0.000017	0.8509

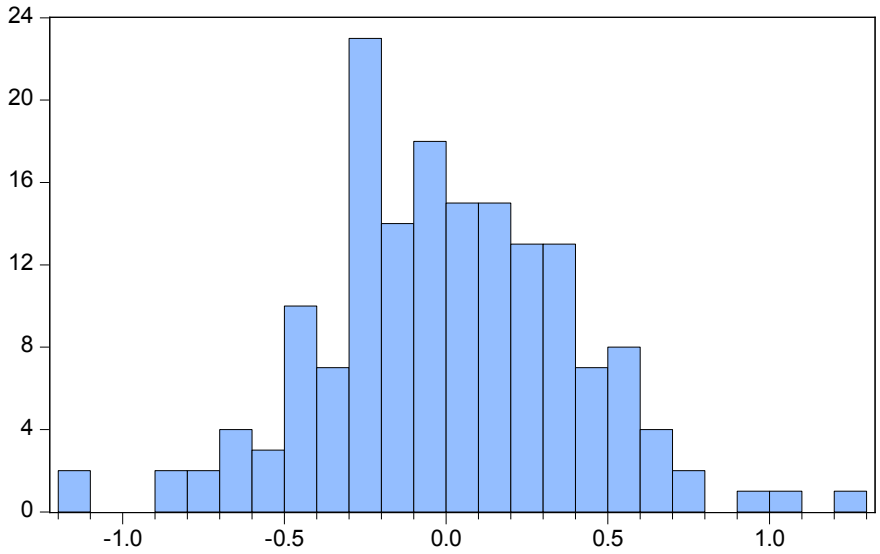
4.3. Post estimation diagnostic tests

4.3.1 Normality test

Jarque-Bera Test is a type of Lagrange multipliernormality test. Normality is one of the assumptions for many statistical tests. Specifically, the test matches the skewness and kurtosis of data to see if it matches a normal distribution. A normal distribution has a skewness of zero (i.e. it's perfectly symmetrical around the mean) and a kurtosis of three; kurtosis tells you how much data is in the tails and gives you an idea about how "peaked" the distribution is. It's not necessary to know the mean or the standard deviation for the data in order to run the test.The null hypothesis for the test is that the data is normally distributed; the alternate hypothesis is that the data does not come from a normal distribution. For the first model the mean value of error terms is -8.07e-18 and Skewness value is -0.005 and Kurtosis value is 3.6. Though it shows non-normality the probability value of Jarque-Bera test is 28.61 percent, which is greater than 5 percent confirming normal distribution of error terms.

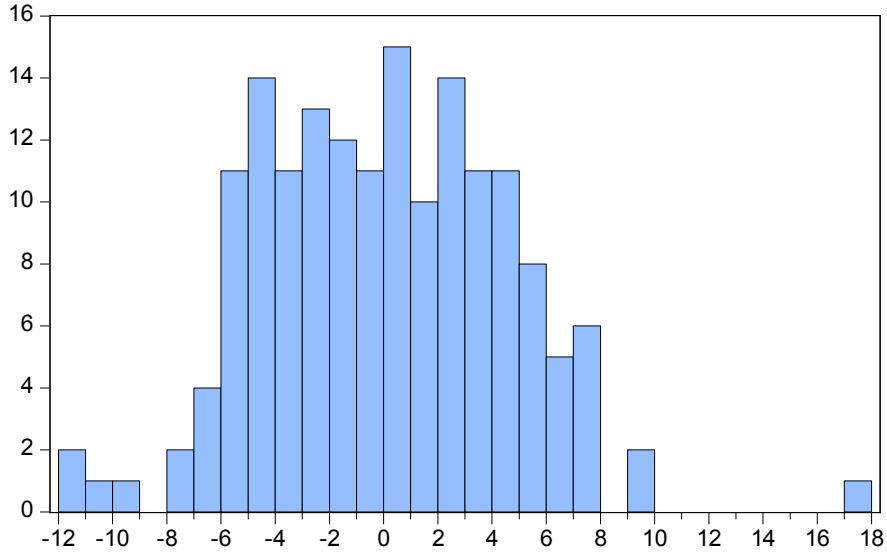
For the second model Jarque-bera test statistics value is 18.21 percent, which is greater than 0.05. Thus the researcher conclude that there is no the problem of non- normal distribution of residuals. Finally for the third model Even the mean value of error term is -1.61e-17, this is closer to zero (0). Also the Skewness value is -0.016. However, Kurtosis value is 3.59. Despite this the probability value of Jarque-Bera test is 29 percent, which is greater than 5 percent. Thus from the result the researcher conclude that there is no problem of non-normality.

Figure 4.1 Normality test for model one (return on asset)



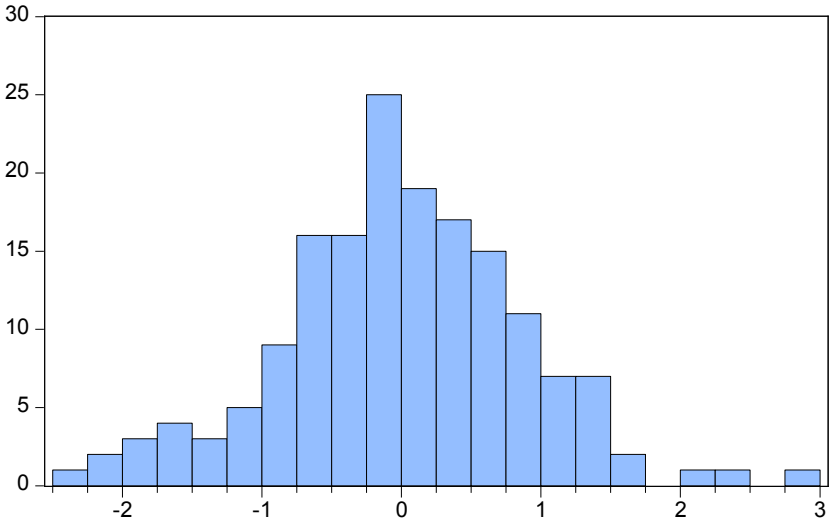
Series: Standardized Residuals	
Sample 2003 2017	
Observations 165	
Mean	-8.07e-18
Median	-0.011737
Maximum	1.236204
Minimum	-1.180738
Std. Dev.	0.391626
Skewness	-0.005003
Kurtosis	3.603292
Jarque-Bera	2.502923
Probability	0.286086

Figure 4.2 Normality test for model two (return on equity)



Series: Standardized Residuals	
Sample 2003 2017	
Observations 165	
Mean	-1.29e-16
Median	0.007853
Maximum	17.70395
Minimum	-11.67119
Std. Dev.	4.536135
Skewness	0.215933
Kurtosis	3.555780
Jarque-Bera	3.405875
Probability	0.182148

Figure 4.3 Normality test for model three (net interest margin)



Series: Standardized Residuals	
Sample 2003 2017	
Observations 165	
Mean	-1.61e-17
Median	-0.010458
Maximum	2.816055
Minimum	-2.320003
Std. Dev.	0.864559
Skewness	-0.016087
Kurtosis	3.599145
Jarque-Bera	2.475071
Probability	0.290098

4.3.2 Multicollienarity Test

Multicollinearity refers to the condition that two or more independent variables are inter-correlated and it is the future of sample not for the population. The classical linear regression model assumes we have perfect multicollinearity if the correlation between two independent variables is equal to 1 or −1, which makes the regression coefficient, is indeterminate and standard errors are finite. On the other hand if multicollinearity is less than perfect, the regression coefficient, although determinate, have larger standard error (in relation to the coefficient themselves) which means the coefficient cannot be estimated with greater precision or accuracy. Correlation matrix of independent variables is used to check the existence of multi-collinearity. The estimation result of E-views is reported below. Correlation coefficient up to 0.8 is tolerable. The entire coefficients of correlation matrix is below 0.8. So the researcher concludes that there is no perfect muticollinearityand the estimation result is consistent and efficient.

Table 4.5 Correlation matrix of independent variables

	MGT	LIQ	ERN	CAD	LOG(ADS)
MGT	1.000000	-	-	-	-
LIQ	0.320007	1.000000	-	-	-
ERN	-0.111607	-0.551003	1.000000	-	-
CAD	0.504144	0.437894	-0.359196	1.000000	-
LOG(ADS)	-0.236771	-0.507439	0.136237	-0.144895	1.000000

4.3.3 Autocorrelation Test

The value of the covariance between two consecutive error terms determines whether there is a problem of autocorrelation or not, which is one of classical linear regression assumption we have to test (Verbeek, 2000). The classical error component panel data model assumes serially uncorrelated disturbances, where the covariance between error terms over time is zero. If the error terms are correlated with one another, it is said to be they are auto-correlated or that they are serially correlated. A number of tests for the presence of autocorrelation in panel data model have been proposed in the literature. The most common test for autocorrelation includes Durbin-Watson test, Breusch pagan Godfrey test, Wooldridge-Drukker and Baltagi and Li (1995) LM statistic. However, in this study Breusch-Pagan-Godfrey Serial Correlation LM test is used. Breusch-Pagan-Godfrey test, which is a more general test for autocorrelation not only first order autocorrelation test as DW-test. In line with that, the Breusch-Pagan-Godfrey serial correlation LM Test was conducted with the null and alternative hypothesis stated here under.

H0:ρ1=0 and ρ2=0 and.....and ρr =0

H1:ρ1≠0 or ρ2≠0 or.....or ρr ≠0

As depicted in the following table, the test result of the p-value of F-statistics and chi-square for return on asset are 47.14 percent and 41.79 percent respectively, for return on equity model the p-value of F-statistics and chi-square are 55.6 percent and 52.9 percent respectively. Finally the p-value of F-statistics and chi-square test statistics of net interest margin are 9.6 and 7.7 percent respectively. Therefore, the p-value is greater than 5%, so for all models we failed to reject the null hypothesis of no autocorrelation of residuals. Thus, we conclude that there is no autocorrelation in the error terms of this particular study.

Table 4.6 Autocorrelation test for model one (return on asset)

Breusch-Pagan-Godfrey Serial Correlation LM Test:

F-statistic	0.756060	Prob. F(2,138)	0.4714
Obs*R-squared	1.745019	Prob. Chi-Square(2)	0.4179

Table 4.7 Autocorrelation test for model two (return on equity)

Breusch-Pagan-Godfrey Serial Correlation LM Test:

F-statistic	0.589858	Prob. F(2,150)	0.5557
Obs*R-squared	1.271955	Prob. Chi-Square(2)	0.5294

Table 4.8 Autocorrelation test for model three (net interest margin)

Breusch-Pagan-Godfrey Serial Correlation LM Test:

F-statistic	2.370861	Prob. F(2,177)	0.0964
Obs*R-squared	5.113727	Prob. Chi-Square(2)	0.0775

4.3.4 HeteroscedasticityTest

This assumption assumes that the error μ_{it} has constant variance given any value of the explanatory variables, in other words, Var ($\mu_{it}|x$) = σ2 (Wooldridge, 2013). This constant variance of the error terms is known as the assumption of homoscedasticity (Brooks, 2008). If the error terms variance is not constant, they are referred to as heteroscedastic. According to Gujarati (2008) and Brooks (2014) even if the estimation is made without fulfilling the homoscedasticity assumption, the estimation is still unbiased but not BLUE (best linear unbiased estimator). Therefore, in this study to make the estimation BLUE the heteroscedasticity test was conducted by using and the null hypothesis was the variance of error terms are constant (homoscedasticity assumption is fulfilled) and with the alternative hypothesis of heteroscedasticity (the variance of error terms is not constant). If p-value of Breusch-Pagan-Godfrey test is greater than 5%, the assumption of homoscedasticity is fulfilled and it will enable us to make best linear unbiased estimator (BLUE), otherwise the error term variances are not constant or problem of heteroscedasticity exists.

In this case, F-statistics probability and Chi- square probability with 4 degree of freedom of return on asset model are 16.5 and 10.7 percent. Both probability values are greater than 5%. So we conclude that there is no problem of Heteroskedasticity. For return on equity the Breusch-Pagan-God Frey test probability of F-statistic and Chi-square are 8.2 and 8.3 percent respectively and for net interest margin it is 68.9 and 68 percent respectively. Thus, the result of p-values is strong enough to fail to reject the homoscedasticity null hypothesis assumption. Hence, it is possible to conclude that, the variance of error terms is constant and the estimated results of this study were the best linear unbiased estimation.

Table 4.9 Heteroskedasticity Test:

Breusch-Pagan-Godfrey test for return on asset model

F-statistic	0.526325	Prob. F(4,195)	0.165
Obs*R-squared	2.136219	Prob. Chi-Square(4)	0.107
Scaled explained SS	5.760198	Prob. Chi-Square(4)	0.178

Table 4.10 Heteroskedasticity Test:

Breusch-Pagan-Godfrey test for return on equity model

F-statistic	1.994396	Prob. F(5,159)	0.0823
Obs*R-squared	9.737570	Prob. Chi-Square(5)	0.0830
Scaled explained SS	10.49097	Prob. Chi-Square(5)	0.0625

Table 4.11 Heteroskedasticity Test:

Breusch-Pagan-Godfrey test for net interest margin model

F-statistic	0.614587	Prob. F(5,159)	0.6889
Obs*R-squared	3.128435	Prob. Chi-Square(5)	0.6802
Scaled explained SS	2.596731	Prob. Chi-Square(5)	0.7619

4.4. Empirical Results

4.4.1. Regression Analysis of Return on Asset (Model One)

The fixed effects coefficients of the regressors indicate how much profitability changes when there is a change in advertisement, capital adequacy, management efficiency, liquidity and earning ability. Moreover, the overall regression is statistically significant, F= 83.18, p = 0.000000 for ROA as financial performance proxy. This indicates that all the independent variables jointly explained the variation in return on assets. Thus, it supports the fact that explanatory variables included in the model are factors in determining the return on assets (ROA) of private commercial banks in Ethiopia. The coefficient of determination represented by adjusted R^2, which indicates, the quality of fitness of the model, shows that about 90% of the variations in return on asset of private banks were explained by independent variables included in the model. However, the remaining 10% changes in return on asset of the bank are caused by other factors that were not included in the model.

Table 4.12 Results of fixed effect regression analysis

Dependent Variable: ROA
Method: Panel Least Squares
Sample: 2003 2017
Periods included: 15
Cross-sections included: 16
Total panel (unbalanced) observations: 165

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.900296	0.745916	3.888235	0.0002
LOG(ADS)	0.297942	0.034948	8.525327	0.0000*
CAD	-1.120416	1.208181	-0.927358	0.3553
LIQ	-0.720599	0.346787	-2.077930	0.0395**
MGT	-0.535855	0.213015	-23.64083	0.0000*
ERN	-0.596941	0.530206	-1.125865	0.2621
Effects Specification				

Cross-section fixed (dummy variables)

R-squared	0.920353	Mean dependent var	4.289996
Adjusted R-squared	0.909291	S.D. dependent var	1.387671
S.E. of regression	0.417938	Akaike info criterion	1.211445
Sum squared resid	25.15278	Schwarz criterion	1.606748
Log likelihood	-78.94425	Hannan-Quinn criter.	1.371912
F-statistic	83.19892	Durbin-Watson stat	1.626920
Prob(F-statistic)	0.000000		

Note: *, **, *** significant at 1, 5 and 10 percent respectively

Source: own computation using Eviews 9

4.4.1.1. Advertisement Expenditure LOG (ADS)

As hypothesized by the researcher, advertisement has positive and statistically significant effect on financial performance of private commercial banks in Ethiopia measured by ROA at 1% 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. Holding other independent variables constant at their average value, when advertisement expenditure increased by 1%, return on asset (ROA) of Ethiopian private commercial banks would be increased by 0.3%. Therefore, it can be concluded that addressing how advertisement 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 leads to their increased profitability. The result is also consistent with Merve et al. (2017), and Hadiza (2014).

4.4.1.2. Management Efficiency (MGT)

Management efficiency is another bank specific variable that has a negative and statistically significant effect on return on asset at 1% level of significance and it is in line with expectations. If the value of cost to income ratio (measure of management efficiency) increases by 1%, return on asset may decreases by 0.5%. This is because as the management efficiency ratio of the bank increases, it implies an increment in the total expense of the bank, which reduces the net profit of the bank that can be generated. The lower the net profit of the bank implies the lower will be the return on asset, as the return on asset of the bank is the proportion of net profit to total asset. Furthermore decrease in cost to income ratio implies to get a unit income a bank devotes little efforts, which indicates efficiency of a bank. Therefore, closer look is required on the bank's expenses in general and non-interest expenses in particular. Moreover, efficient management of banks reduces banks failure and/or enhances banks profitability. As stated by Efficiency structure (ES) hypothesis, an efficiently managed bank will earn higher profits than the less efficient ones.

4.4.1.3. Liquidity (LIQ)

Likewise, liquidity is seen to have a negative and significant effect on profitability at 5% significant level. Table 4.12 above depicted that, the coefficient of liquidity measured by liquid assets to total deposits is -0.72 and P-value is 0.0395. Holding other independent variables constant at their average value, when liquidity increased by one percent, return on asset (ROA) of Ethiopian private commercial banks would be decreased by 0.72%.The possible reason for the significant negative return is much of the assets section of the balance sheet of the banks is possessed by the liquid cash or the cash on hand, in most

of the banks it consists above the specified limit permitted by NBE. Since holding large amount of cash on hand will not result any benefit, the return on assets of the Ethiopian banks are very poor. This is due to the banks' excess liquidity position.

In fact, a bank should be liquid enough to meet its depositors' demand of withdrawing money at any time they want to withdraw. The lower ratio of this reveals that the bank will face difficulty in meeting payments in the right time. A lower ratio of this would also mean that the bank will not effortlessly get funds or else at an extremely high rate of interest which will mount the cost of funding and eventually invade profitability of the bank. On the other hand, if the bank is excessively liquid, it means that the bank is in 'liquidity trap' and is keeping its productive assets idle. This ultimately put the bank's profitability at risk because an extremely higher ratio of this would mean that the bank has kept excess liquid assets inactive and hence losing interest income.

4.4.2. Regression Analysis of Return on Equity (Model Two)

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. The estimation results reported in Table 4.13 depicted that, the Adjusted R^2 values of 0.65 is an indication that the model is a good fit. This means that 65% of variations in return on equity of Ethiopian private banks were explained by the independent variables included in the model. However, the remaining 35% of the changes in return on equity of the banks are caused by other factors that were not included in the model. Furthermore, the F-statistic was 16.16 and all independent variables except liquidity, used in the model are statistically significant. The results of the regression model are presented below.

Table 4.13 Results of fixed effect regression analysis

Dependent Variable: ROE
Method: Panel Least Squares
Sample: 2003 2017
Periods included: 15
Cross-sections included: 16
Total panel (unbalanced) observations: 165

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	39.89767	8.639820	4.617882	0.0000
LOG(ADS)	0.707792	0.404796	1.748518	0.0825***
CAD	-0.693467	0.139942	-4.955404	0.0000*
LIQ	-0.035919	0.040168	-0.894235	0.3727
MGT	-0.129900	0.024673	-5.264841	0.0000*
ERN	-0.184624	0.061413	-3.006278	0.0031*

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.691811	Mean dependent var	21.87609
Adjusted R-squared	0.649007	S.D. dependent var	8.171045
S.E. of regression	4.840906	Akaike info criterion	6.110494
Sum squared resid	3374.550	Schwarz criterion	6.505796
Log likelihood	-483.1158	Hannan-Quinn criter.	6.270961
F-statistic	16.16231	Durbin-Watson stat	1.423188
Prob(F-statistic)	0.000000		

Note: *, **, *** significant at 1, 5 and 10 percent respectively

Source: own computation using Eviews 9

4.4.2.1. Advertisement expenditure Log (Ads)

Advertisement expenditure has positive and significant effect on return on equity at 10% level of significance. Holding other control variables constant at their average value, when advertisement expenditure increases by 1% percent, return on equity of private banks increases by 0.71%. Even though, advertisement expenditure decreases net profit, in this study it implies an increment in the advertisement expense of the bank, which increases the net profit of the bank that can be generated. The higher the net profit of

the bank implies the higher will be the return on equity, as the return on equity of the bank is the proportion of net profit to total equity. However mere increase in advertisement expenditure will not increase return on equity. That means advertisement expenditure will increase return until some level but beyond that point it may not be the case. Hence, it needs detail, timely, clear, and easily understandable and efficient advertisement plan and budget. So, it is important determining the threshold level of advertisement expenditure. Riaz, et al. (2015) and Ors (2003) found similar relationship between return on equity and advertisement expenditure.

4.4.2.2. Capital Adequacy (CAD)

Capital adequacy has negative and significant effect on return on equity at 1% level of significance. A 1% percent increase in capital adequacy may lead to a reduction in return on equity by 0.69%. The possible reason for the negative association between CAD and ROE could be attributed to the fact that, banks are more dependent on customers deposit than shareholder's investment in share capital of the bank. Moreover, capital adequacy is computed as the ratio of total capital to total asset, higher capital adequacy ratio signifies the bank is operating over cautiously and it ignores potentially profitable trading opportunities. Furthermore, Banks capital creates liquidity for the bank. If the banks are more liquid, it will have a direct effect on the profitability of banks by losing its investment or expansion to risky but profitable ventures or areas.This result is in line with (Maruthi, Derese and Tigist, 2019).

4.4.2.3. Management Efficiency (MGT)

Management efficiency is another variable which is found to have statistically significant effect on return on equity and it is in line with expectations at 1% level of significance. A

1% increase in cost to income ratio a proxy for management efficiency leads 0.13% reduction in return on equity. Management efficiency or operational efficiency of the banks, measured by the ratio of cost to income is statistically significant and is negatively correlated with profitability. The result of the study implies that more operationally efficient commercial banks reported higher ROE than those commercial banks that have poor expense management over the study period. Thus, the empirical result of the study reveals that a reduction in costs increases the profits of the commercial banks. This denotes that commercial banks in Ethiopia have much to profit if they are able to exercise efficient cost management practices. Generally, the study indicates that poor operational efficiency, i.e. management's failure to control costs, is one of the factors that negatively affect the profitability of commercial banks in Ethiopia. The result of the study is consistent with Pasiouras and Kosmidou (2007), and Kosmidou (2008), among others. These studies reinforce the maxim that poor operational efficiency is one the key contributors to weak profitability.

4.4.2.4. Earning Ability (ERN)

Earning Ability (EA) measured by interest income to total income is -0.184624 and its P-value are 0.0031. When earning ability increased by 1%, ROE of Ethiopian private commercial banks would be decreased by 0.18% and statistically significant at 1% level of significant. The negative relationship noticed between Earning quality and Return on equity, could be attributed to the fact that banks are concentrating more on interest income rather than non-interest income. This finding is consistent with previous studies (Maruthi, Derese and Tigist, 2019).

4.4.3. Regression Analysis of Net Interest Margin (Model Three)

The estimation results reported in Table 4.14 shows that 75% of the variations in net interest margin of private banks were explained by independent variables included in the model. However, the remaining 25% changes in net interest margin of the bank are caused by other factors that were not included in the model. Furthermore, the F-statistic (F value= 26.3), was significant at $p<0.01$, which indicates that all the independent variables jointly explained the variation in net interest margin. The detail interpretation of the coefficients is presented below.

Table 4.14 Results of fixed effect regression analysis

Dependent Variable: NIM
Method: Panel Least Squares
Sample: 2003 2017
Periods included: 15
Cross-sections included: 16
Total panel (unbalanced) observations: 165

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.691200	1.646695	-3.456135	0.0007
LOG(ADS)	0.675992	0.077152	8.761882	0.0000*
CAD	0.033054	0.026672	1.239263	0.2173
LIQ	-0.007200	0.007656	-0.940416	0.3486
MGT	-0.028362	0.004703	-6.031171	0.0000*
ERN	0.057114	0.011705	4.879476	0.0000*

Effects Specification
Cross-section fixed (dummy variables)

R-squared	0.785075	Mean dependent var	6.546973
Adjusted R-squared	0.755224	S.D. dependent var	1.864879
S.E. of regression	0.922646	Akaike info criterion	2.795271
Sum squared resid	122.5837	Schwarz criterion	3.190573
Log likelihood	-209.6099	Hannan-Quinn criter.	2.955738
F-statistic	26.30000	Durbin-Watson stat	1.771522
Prob(F-statistic)	0.000000		

Note: *, **, *** significant at 1, 5 and 10 percent respectively

Source: own computation using Eviews 9

4.4.3.1 Advertisement expenditure Log (Ads)

Advertisement expenditure has positive and significant effect on net interest margin at 1 percent level of significance. A 1 percent increase in advertisement expenditure increases net interest margin by 0.675 percent. The possible reason for this may be, as the banks introduces new services, latest techniques and new branch openings, it is advertisement that communicate with customers about these new range of bank services. Since more customers are attracted, the bank deposit amount increases. Consequently, the banks' lending ability increases and more borrowers are involved. Due to these facts, interest income of the banks increase. Therefore, the net interest margin of private commercial banks grows, when; advertisement plays the crucial role of communication for private banks services.

4.4.3.2. Management efficiency (MGT)

Management efficiency is another variable which is found to have statistically significant effect on net interest margin and it is in line with expectations. A 1 % increase in cost to income ratio a proxy for management efficiency leads 0.028 % reduction in net interest margin. The result indicating inefficient banks tend to have high costs, increasing charges and the NIM. Experts' opinions also confirm the views that bank management has significant role in determining the balance between profit earning asset and non-profit generating resources. It has also big role in allocating existing scarce resources for highly profitable sectors, given market dynamism of the industry. Most of the time, banks with better management succeed in registering better income and competing in the market. However, banks with inefficient management are still struggling to survive. The result is consistent with the findings of Meshesha (2017).

4.4.3.3. Earning Ability (ERN)

Earning ability is measured in terms of the interest income to total income ratio and it is the ability of the bank in generating income from its lending services. In other words, it measures the interest income from lending operations as a percentage of the total income generated by the bank in a year. Interest income includes income on advances, interest income on deposits with other banks and interest income on debt instruments. According to table 4.14 earning ability has statistically significant and positive effect on the net interest margin of Ethiopian commercial banks which shows a 1 % increase in earning ability will increase 0.057 % in the net interest margin (coefficient 0.057114 and p value 0.0000). This implies an increment in the interest income to total income of the bank which is the direct reflection of an increment in the loans and advances granted to customers will have positive effect on net interest margin.

4.5. Interview Results:

The very purpose of semi structured interview with the concerned officials at the respective banks was to gather information to fill the gap that the study couldn't cover by simply assessing secondary data. The interview was conducted with the concerned employees of the respective banks' so as to assess the level of awareness about advertisement and its real practice in the Ethiopian private commercial banks. For this study purpose, six banks were selected. Two are senior banks namely, Dashen and Wegagen. The other two medium banks are Addis international and Abay bank. The rest two small banks are Debub global and Enat bank. The interview questions were distributed to all private commercial banks. But the above banks were selected as a sample bank, because, these banks are responded willingly at the appropriate time.

Accordingly, all the responses of interview questions are summarized and presented below.

- To understand and asses the overall advertisement objectives of private banks, the first question raised was, what are the main objectives of advertisement in your bank? In this regard, the advertisement objectives of the banks are more or less the same. To mention few of the objectives, creating awareness about the bank's product and service, building the bank's brand and image, increasing sales and the likes. Here, we can see similarity and there is a clear advertisement objective among private commercial banks in Ethiopia.

- The second question forwarded to the banks was, how the bank design advertisement plan in terms of advertiser, advertisement media and advertisement theme? Out of the six sampled banks, only two of the banks response shows that advertisement plan of their banks emanate or comes from the bank over all corporate business plan and general objectives. More over the banks choose advertiser, media and advertisement theme in consistent with the established goals of the banks advertisement and the specific yearly tactics that are drawn every year. Once the yearly advertisement plans are decided, the details that include the message, vehicles and advertisement agency. The other four banks advertisement plan developed based on the nature of the bank service and it's depending on the need of advertisement.

- The third question was, how would you plan budget and time for advertisement? Some of the banks budget prepared based on the outlined advertisement plan

and it also dictate the timing of advertisement. The other banks response shows that advertisement budget prepared based on previous year budget, type of media outlet and the type of message to be delivered or advertised.

- The fourth question presented was, how would you choose best media and advertiser? Best media should be selected based on geographical coverage, public image and cost. The advertiser can also be selected based on its experience, competency in the market and able to understand the banks vision and mission.

- The last but not the least question was, how do you measure effectiveness of advertisement? In this regard, measurement of advertisement effectiveness in the Ethiopian private commercial banks is not performed in an organized manner. According to the responses of the banks, some of the banks tried to measure advertisement effectiveness through small scale survey which was conducted one or two of their own branches. The other banks were not made any effort or use any scientific method to measure advertisement effectiveness.

CHAPTER FIVE
CONCLUSION AND RECOMMENDATION

5.1. CONCLUSION

Strong financial sector is essential for the well-functioning of the economy. However, the performance of financial sectors, which is dominated by banks, is affected by many factors. Moreover banking sector in Ethiopia is dominated by private banks. As a result identifying the determining factors of private banks financial performance has paramount importance. This study is intended to examine the effect of advertisement on the financial performance of Ethiopian private commercial banks. The specific aim of the study is to assess the trend of advertisement in the Ethiopian private commercial banks, to investigate the relationship between advertisement and financial performance of private commercial banks in Ethiopia and to examine the effect of bank specific variables on financial performance of Ethiopian commercial banks.

To achieve the objectives listed on the above paragraph primary and secondary data is collected. The secondary data is analyzed by panel data estimation technique using E-views 9. Return on asset, return on equity, net interest margin are used as a proxy for financial performance of private banks i.e. used as dependent variable. Advertisement used as independent variable. Capital adequacy, liquidity, management efficiency and earning ability were used as control variables.

Based on the descriptive and empirical evidence obtained from the econometric results in Chapter 4, the researcher generally concluded that financial performance of private commercial banks are highly affected by the Bank specific variables.

Among the variables used in the regression natural logarithm of advertisement expenditure has positive and significant effect on return on asset, return on equity and net interest margin. The presence of a positive correlation between the expenses for advertisement activities and profits will first be considered on a hypothetical level.Through investments allocated primarily to advertisement, a bank creates an image of itself in the minds of consumers, through a more pronounced presence in the media, the bank puts invisible pressure on clients who are making their final decision about which bank they will choose. If we exclude other variables that affect profitability (measured by ROA, ROE, NIM), by the growth of the clients' confidence in the bank, and therefore the deposit potential, the amount of the bank's deposits and market share increased, it can be concluded that banking advertisement positively affects the overall profit of the bank.

On the other hand, under the study period, the trends of advertisement expenditure of the banks are increased with a very high increasing rate. If the banks have allocated high amounts of funds to advertisement expenditures, without determining the marketing strategy at the level of the entire bank, it is exposed to the problem of high operational inefficiency, and consequently the risk of insufficient growth and development, that is, the risk of inadequate banking marketing. The consequences of this problem are the loss of confidence due to the discontinued utilization of marketing activities, which sends a negative message about a possible crisis within the bank, which may result in far more complex negative effects.

Similarly, Expense management or operational efficiency of the bank, measured by cost to income ratio (CIR), is statistically significant and is negatively correlated with

profitability that measured by ROA, ROE and NIM. The result of the study implies that more operationally efficient commercial banks reported higher profits than those commercial banks that have poor expense management over the study period. Therefore, one of the factors that negatively affect the banks' profitability is the failure of management to control expenses. Since, Operational efficiency in private commercial banks is an important and key determinant of financial performance, therefore, private banks have much to gain, if they improve on their managerial practices. Efficient expense management is a prerequisite to financial performance since Ethiopian private banks may not have reached the maturity level required to link quality effects emanating from increased spending to higher bank financial performance.

The other important variable in the study is earning ability. Earning ability has positive and significant effect on net interest margin and has negative and significant effect on return on equity model. On the other hand, earning ability has no significant effect on return on asset model. Earning ability is seen to have a negative and significant effect on ROE and positive and significant effect on NIM. This implies that the bank management needs to focus mainly on its core businesses i.e. enhancing interest income rather than awaiting income from other peripheral works or other wind fall earnings such as from change in foreign currency.

The remaining bank specific variables are capital adequacy and liquidity. Capital adequacy has negative significant effect on return on equity while it has no significant effect on other models. Liquidity has negative significant effect on return on asset and it has no significant effect on return on equity and net interest margin.

Based on the study findings, the management of private commercial banks should strive to improve the performance of the banks by giving more attention to the variables identified to have significant effect on the financial performance of the bank.

5.2. Recommendations

Based on the results found the researcher forwards the following recommendations:

5.2.1 Advertisement expenditure is the main determinant of performance of financial sector i.e. private commercial banks in Ethiopia. As a result, commercial banks may able to increase their performances by making promotion to their customers. This paper further recommended that bank managers may apply latest techniques of brand image, brand awareness and advertisements to gain competitive edge and satisfy their customers. However, when spending on advertisement banks should consider the maximum level because advertisement theory states that advertisement will increase profitability until certain level. Beyond that certain level only the cost will continuously increases, if banks continuously increase advertisement effort.

5.2.2 Almost all Ethiopian private commercial banks have clear advertisement objectives. But, most of the banks don't have strong advertisement plan that drive out from the bank's advertisement objectives. Therefore, Ethiopian private commercial banks should implements proper advertisement plan to meet their overall advertisement objectives.

5.2.3 Even though, The Ethiopian private commercial banks spend huge amount of money for advertisement, almost all the banks don't have proper evaluation

method to measure effectiveness of advertisement with respect to the bank financial performance. Hence, to enhance the knowledge about the relationship between advertisement and bank performance, moreover the banks management to make proper decision regarding advertisement, they should conduct a strict general level survey and quantitative methods of measuring the impact of advertisement on bank financial performance.

5.2.4 In this study Management efficiency is found the most determinant bank specific factor that has a negative and significant effect on bank's profitability. Therefore, management of private commercial banks should closely follow the bank's expenses in general and non-interest expenses in particular.

5.2.5 Earning ability is the factor which affects performance of private commercial banks in Ethiopia. So, private Banks in Ethiopia are recommended to revise their credit procedures and policies to enhance interest income and to reduce the nonperforming loans. This is because, for instance a higher lending interest rate may cause low profit for investors and in turn low amount of loans, which in turn negatively affects banks performance. Also collaterals should be based on the amount of loans provided and income and business practice of the borrowers.

References

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

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

Anteneh, T. (2018). Financial Performance analysis of Commercial Banks in Ethiopia: A CAMEL Approach. *Msc thesis submitted to Addis Ababa University, Addis Ababa, Ethiopia.*

Antonio, M. (2015). *Stakeholders Management and Performance Measurement in Banks.*

Arens, W. F. (1996). *Contemporary Advertising. USA: Richard D. Irwin, A. Times Mirror Higher Education Group Inc. Company.*

Ayres, K. (2015). *Marketing Management, 3rd ed, Rutledge.*

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

Brooks, C. (2014). Introductory Econometrics for Finance, Third Edition. *New York: Cambridge University Press.*

Chowdhury, S. (2017). Measuring the Relationship among the Advertisement Expenditure, Sales Revenue and Profit on Steel Industries and Banking Industries in Bangladesh.*European Journal of Business and Management. ISSN 2222-1905 (Paper) ISSN 2222-2839, Vol.9, No.9, 2017.*

Creswell, J. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, *3rd edition, by SAGE Publication Inc., 2009.*

Dawit, F. (2016). Determinants of commercial banks financial performance in Ethiopia.*Msc thesis submitted to Addis Ababa University, Addis Ababa, Ethiopia.*

David, A. A. & James, M.C. (1982). Are you over Advertising? *Journal of Advertising Research (August/September) 57-70.*

Dinu, G. and Dinu, L. (2012) 'The Impact of Advertising on Consumer Behavior in the Resita City Population, *Annals of DAAAM & Proceedings of the 23rd International DAAAM Symposium, Volume 23, ISSN 2304-1382, No.1, pp. 2, ISBN 978-3-901509-91-9, CDROM version, Ed. B. Katalinic, DAAAM International, Vienna, Austria, EU.*

Ermias, M. (2016). Financial Performance of Private Commercial Banks in Ethiopia: A CAMEL Approach. *Msc thesis submitted to Addis Ababa University, Addis Ababa, Ethiopia.*

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

Evern, Ors. (2003). The Role of Advertising in Commercial Banking. *Finance and Economics Department HECSchool of Management Paris, Unpublished.*

Eskinder, D. (2011). Assessing the Effectiveness of Advertising at Dashen Bank Share Company. *MBA thesis submitted to St. Mary's university, Addis Ababa, Ethiopia.*

Fadzlan, S. R. C. (2008). Determinants of Bank Profitability in a Developing Economy: Evidence from the Philippines. *Asian Academy of Management Journal of Accounting and Finance, 91-112.*

Gujarati, D. (2004). Basic Econometrics, *4th edition, McGraw-Hill, Boston.*

Henderson, S. (2014).*Advertising Management, 2nd Ed, Cambridge Press.*

Hadiza S. (2014). Impact of Marketing Communication on Financial Performance of Banks: *A Study of First Bank of Nigeria PLC. Research Journal of Finance and Accounting,ISSN 2222 1697 (Paper) ISSN 2222-2847, Vol.5, No.24.*

Habtamu, B. (2013). Financial Performance of the Ethiopian Banking Sector: *International Journal of Science and Research (IJSR) ISSN: 2319-7064 Index Copernicus Value (2013): 6.14 | Impact Factor (2013): 4.438.*

John, M. (2008). The influence of banking advertising on bank customers: *an examination of Greek bank customers' choices. Banks and Bank Systems, 3(4). LLC Consulting Publishing Company Business Perspectives. Volume 3, Issue 4, 2008.*

Khrawish, H.A. (2011). Determinants of Commercial Banks Performance: Evidence from Jordan, *International research Journal of Finance and Economics*, 81, 148-159.

Kimball, R.C. (1998), "Economic Profit t and Performance Measurement in Banking", *New England Economic Review, Federal Reserve Bank of Boston, issue July, pp. 35-53.*

Kotler, P. (2009). *Marketing Management. Analysis, planning and control New Jersey.*

Kotler, P. (2012). *Marketing Management Millennium Edition, 14th ed. Prentice-Hall, Inc. Upper Saddle River, New Jersey.*

Merve, A and Huseyin, T. (2017). "Advertising effectiveness on financial performance of banking sector: Turkey case", *International Journal of Bank Marketing, Vol. 35 Issue: 4, pp.649-661, https:// doi.org/10.1108/IJBM-03-2016-0036.*

Mulalem, G. (2015). Analyzing Financial Performance of Commercial Banks in Ethiopia: CAMEL Approach. *Msc thesis submitted to Addis Ababa University, Addis Ababa, Ethiopia.*

M. Nasrin, & Abdulla, S. (2018). A study on the Effectiveness of Advertisement in Bank-Muskat: *International Journal of Business and General Management (IJBGM) ISSN (P): 2319-2267; ISSN (E): 2319-2275 Vol. 7, Issue 3, Apr - May 2018; 53-60.*

Meweal, N. (2015). The Effect of Advertisement on Consumers Buying Behavior. *MBA thesis submitted to St. Mary's university, Addis Ababa, Ethiopia.*

Meron, N. (2017). The Effect of Media Advertising on Customers Brand Choice: The Case of United Bank S.C. *MA thesis submitted to Addis Ababa University, Addis Ababa, Ethiopia.*

National Bank of Ethiopia. (2015). *Annual Report 2014/15. Addis Ababa: NBE*.

Ongore, V. a. (2013). Determinants of Financial Performance of Commercial banks in 63 Kenya. *International Journal of economics and Financial Issues, 237-252.*

Riaz S. M. S. (2015). The Impact of Advertising on the Profitability of Public & Private Sector Commercial Banks in Pakistan: *European Journal of Business and Management, ISSN 2222-1905 (Paper) ISSN 2222-2839, Vol.7, No.28, 2015.*

Rahel, T & Maru, S. (2015). Determinants of Financial Performance of a Private Commercial Bank in Ethiopia: *Journal of Business and Administrative Studies. Volume 7, Number 2, December 2015.*

Sisson, M. (2015). *Advertising, HRM Journal, 7 (12), pp 7 –21.*

Schuler, K. (2015). *Advertising in Banking Sector, Organizational Dynamics, 12, (6), pp 11–14.*

Storey, B. (2013). *Principles of Marketing, 4th Ed*.

Tamirat, S. (2016). Relative Input and Output Efficiency and Productivity of Private Commercial Banks in Ethiopia. *St. Mary's University the 8th multidisciplinary research seminar.*

Tigist, A. (2014). Determinants of Financial Performance: An Empirical Study on Ethiopian Commercial Banks.*Msc thesis submitted to Jimma University, Jimma, Ethiopia.*

Tesfaye, K. (2013). Determinants of Commercial Banks Performance in Ethiopia. *MBA thesis submitted to St. Mary's university, Addis Ababa, Ethiopia.*

Tewodros, B. (2019). Determinants of financial performance in private banks: A case in Ethiopia. *African Journal of Business Management. Vol. 13(9), pp. 291-308, DOI: 10.5897/AJBM2019.8771, Article Number: 95A3D0560818 ISSN: 1993-8233*. .

Tesfaye, B. (2014). The Determinants of Ethiopian Commercial Banks Performance.*European Journal of Business and Management,ISSN 2222-1905 (Paper) ISSN 2222 2839, Vol.6, No.14, 2014.*

Wikipedia, the free encyclopedia, *List of banks in Ethiopia*.

World Bank (2013). Ethiopia Economic Update II: *Laying the Foundation for Achieving Middle Income Status.*

Wilmshurst, J. (1985). *The Fundamentals of Advertising. The marketing Series, pp. 3 & 96. William Heinemann Ltd, London.*

Zerayehu, S. K. T. (2013). Competition in Ethiopian Banking Industry. *African Journal of Economics Vol. 1. (5), PP. 176-190.*

Appendix-1

Panel stationary test

Variables	ADF test		PP test stat		Decision
	Test statistics	Probability	Test statistics	Probability	
ROA	89.0895	0.000	111.227	0.000	I(0)***
ROE	69.8152	0.0001	88.7498	0.0000	I(0)***
NIM	47.7610	0.0362	64.2093	0.0006	I(0)**
LOG(ADS)	109.024	0.000	134.653	0.000	I(1)***
CAD	108.870	0.000	136.319	0.000	I(0)***
LIQ	56.4222	0.0049	79.2968	0.000	I(0)***
MGT	77.151	0.000	137.107	0.000	I(0)***
ERN	57.7528	0.0035	58.5284	0.0029	I(0)***

Note: *** and ** refers stationary at 1 and 10 percent level of precision respectively

Source: own computation using EVIEWS 9.

Appendix-2

Cross section dependence test

Residual Cross-Section Dependence Test for return on asset model

Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in residuals

Periods included: 15

Cross-sections included: 16

Total panel (unbalanced) observations: 165

Test employs centered correlations computed from pair wise samples

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	142.1183	120	0.0821
Pesaran scaled LM	0.394934		0.6929
Bias-corrected scaled LM	-0.176494		0.8599

Pesaran CD	0.016569	0.9868

Residual Cross-Section Dependence Test for return on equity model

Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in residuals

Periods included: 15

Cross-sections included: 16

Total panel (unbalanced) observations: 165

Test employs centered correlations computed from pair wise samples

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	215.5586	120	0.0000
Pesaran scaled LM	5.135488		0.0000
Bias-corrected scaled LM	4.564060		0.2514
Pesaran CD	0.430017		0.6672

Residual Cross-Section Dependence Test for net interest margin model

Residual Cross-Section Dependence Test

Null hypothesis: No cross-section dependence (correlation) in residuals

Periods included: 15

Cross-sections included: 16

Total panel (unbalanced) observations: 165

Test employs centered correlations computed from pair wise samples

Test	Statistic	d.f.	Prob.
Breusch-Pagan LM	174.0940	120	0.0009
Pesaran scaled LM	2.458955		0.1391
Bias-corrected scaled LM	1.887526		0.0591

Pesaran CD	7.654193	0.0589

Appendix-3

Coefficient Confidence Intervals

Coefficient Confidence Intervals for return on asset model

Coefficient Confidence Intervals

Sample: 2003 2017

Included observations: 165

		90% CI		95% CI		99% CI	
Variable	Coefficient	Low	High	Low	High	Low	High
C	2.900296	1.665429	4.135163	1.425937	4.374654	0.953156	4.847436
LOG(ADS)	0.297942	0.240086	0.355799	0.228865	0.367019	0.206714	0.389170
CAD	-1.120416	-3.120564	0.879732	-3.508475	1.267644	-4.274253	2.033421
LIQ	-0.720599	-1.294706	-0.146492	-1.406050	-0.035149	-1.625853	0.184654
MGT	-5.035855	-5.388503	-4.683208	-5.456896	-4.614815	-5.591911	-4.479800
ERN	-0.596941	-1.474699	0.280818	-1.644933	0.451052	-1.980992	0.787111

Coefficient Confidence Intervals for return on equity model

Coefficient Confidence Intervals

Sample: 2003 2017

Included observations: 165

		90% CI		95% CI		99% CI	
Variable	Coefficient	Low	High	Low	High	Low	High
C	39.89767	25.59441	54.20093	22.82041	56.97492	17.34426	62.45107
LOG(ADS)	0.707792	0.037651	1.377933	-0.092317	1.507902	-0.348887	1.764472

CAD	-0.693467	-0.925141	-0.461793	-0.970072	-0.416862	-1.058771	-0.328163
LIQ	-0.035919	-0.102417	0.030578	-0.115314	0.043475	-0.140773	0.068935
MGT	-0.129900	-0.170747	-0.089054	-0.178669	-0.081132	-0.194307	-0.065493
ERN	-0.184624	-0.286294	-0.082955	-0.306012	-0.063237	-0.344937	-0.024312

Coefficient Confidence Intervals for net interest margin model

Coefficient Confidence Intervals

Sample: 2003 2017

Included observations: 165

		90% CI		95% CI		99% CI	
Variable	Coefficient	Low	High	Low	High	Low	High
C	-5.691200	-8.417311	-2.965089	-8.946017	-2.436384	-9.989737	-1.392664
LOG(ADS)	0.675992	0.548268	0.803717	0.523497	0.828488	0.474596	0.877389
CAD	0.033054	-0.011102	0.077209	-0.019666	0.085773	-0.036571	0.102678
LIQ	-0.007200	-0.019874	0.005475	-0.022332	0.007933	-0.027184	0.012785
MGT	-0.028362	-0.036147	-0.020577	-0.037657	-0.019067	-0.040637	-0.016086
ERN	0.057114	0.037736	0.076491	0.033978	0.080250	0.026559	0.087668