

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

ASSESSMENT ON THE ROLE OF NATIONAL BANK OF ETHIOPIA REGULATIONS ON THE PERFORMANCE OF PRIVATE BANKS: IN THE CASE OF ADDIS INTERNATIONAL BANK SHARE COMPANY

BY
ASHENAFI MULUNEH HAILE
SGS/0006/2008A

January, 2018

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

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ACKNOWLEDGEMENTS

First and foremost, thanks to almighty God for successful completion of this thesis. The completion of this study would has not been realized without the help of many individuals and, I would like to take this opportunity to thank everyone who involved and supported me.

I would like sincerely to thank my advisor Zemenu Aynadis (Asst. Professor) for his continual advice and follow up, concern and systematic review of this research work, without his thoughtful guidance this study would not be completed.

I would like also to express my gratitude to senior management of Addis International Bank, special to Ato Dagne Gessess and Ato Tekle Wakjira for giving me the required data for the study.

Finally, my special thanks go to W/r Bethel Mulugeta for her consistent support during the entire research work.

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LIST OF ABBREVIATIONS AND ACRONYMS

AASCCU Addis Ababa Saving and Credit Corporative Union

AdIB Addis International Bank

AfDB Africa Development Bank

ATM Automatic Teller Machine

EBIT Earning Before Interest and Tax

BE Branch Expansion

CBE Commercial Bank of Ethiopia

DBE Development Bank of Ethiopia

GDP Growth Domestic Product

CR Capital Requirement

ICT Information and Communication Technology

CBRC China Banking Regulatory Commission

IR Interest Rate

IMF International Monetary Fund

L/C Letter of Credit

GoE Government of Ethiopia

GTP Growth and Transformation Plan

MFI Micro Finance Institute

NBE National Bank of Ethiopia

NGO Non Governmental Organization

NCA Nordic Competition Authorities.

FCY Foreign Currency

PPS Premier Switch Solution

POS Point of Sales

OECD Organization for Economic Cooperation and Development

SACCO Saving and Credit Cooperatives

SC Share Company

SMS Short Message Service

SPSS Statistical Package for Social Science

OLS Ordinary Least Square

ROA Return on Asset

RR Reserve Requirement

TA Total Asset

TB Treasure Bill

WB World Bank

ABSTRACT

The objective of this study was to examine the role of National Bank of Ethiopia regulation on the performance of Addis International Bank Share Company. The study had four specific objectives of assessing how capital requirement, branch expansion, interest rate and reserve requirement affect the performance Addis International Bank S.C. The research examined the relationship between National Bank of Ethiopia regulations and the performance of Addis International Bank S.C. The secondary data collected through structured document i.e annual assembly magazine from 2012 upto 2016 G.C. reviews from the records held by the Addis International Bank S.C.. and analyzed using SPSS. The findings of the study in some areas concur with past studies while in others it contradicts past findings by other scholars. The R square also, called coefficient of determination is 0.669 and adjusted R square is 0.542 indicates that the model can explain 54.2% of the variations in the return on assets of the Addis International Bank S.C. and that there are other factors, which can explain 45.8% of the variations in return on assets (ROA). This shows that the independent variables (capital requirement, reserve requirement, branch expansion and interest rate) of this study have high role to play on the performance of Addis International Bank S.C. Returns on assets (ROA) had the positive correlation with the reserve requirement, capital requirement, branch expansion, interest rate, firm's size and GDP except inflation rate. Regulation is a key pillar of financial institution operations in Ethiopia and by extension pillar to financial prosperity and stability. Every year banking system contribute to the development of the country, the study recommends the Government of Ethiopia to develop policy which will help banks to operate more in a conducive environment and this can create financial stability of financial institution in the country.

Key words: Capital requirement, Branch expansion, Interest rate, Reserve requirement, Return on Assets, Bank Performance.

CHAPTER ONE

INTRODUCATION

1. Background of the Study

Banks play a key role in improving economic efficiency by channeling funds from resource surplus unit to those with better productive investment opportunities. Banks also play key role in trade and payment system by significantly reducing transaction costs and increasing convenience (NCA, 2006).

Before 1980s, prudential regulation and supervision in banking was dependent on reserve requirements, liquidity constraints, portfolio requirements, and interest rate controls. Until early 1980s, high capital seemed enough for soundness to meet the obligations and main emphasis was put on a minimum level of capital. Basel Committee, founded in 1975, presented a set of minimum capital requirements that evolved into a risk-based capital regulation that recognizes different risk weights for different bank assets. In 1988, Capital Accord (Basel I), that contained a minimum risk-weighted capital ratio of 8%, was introduced with a particular focus on credit risk only by means of skipping other risks such as market risk and operational risk. In 1996, capital accord took into consideration some dimensions of market risk in capital adequacy regulations. In the light of the developments in financial markets, financial products, risk management techniques, technological innovations and global convergence, as well as taking into account the previous experiences and appeals of not only developed countries but also developing countries, the Committee published Basel II criteria in 2004. Basel II was based on three pillars: minimum capital requirements, supervisory review, and market discipline. In addition, the latest and more complex accord, Basel III, agreed upon in 2010, redefined the capital adequacy measurements and set higher capital, liquidity, and leverage requirements (Caprio, 2013).

Regulators worldwide are working to reduce risk in the financial markets, and banks are at the center of these efforts. Using the lessons learned during the 2008 financial crisis, regulators are instituting measures to help ensure that banks have sufficient capital and liquidity to cover loan losses and cash outflows in the event of another market tailspin. The

new regulations aim directly at the heart of a banking institution, its balance sheet, and banks now have the challenge of managing their balance sheet in line with these new regulatory guidelines. A bank's balance sheet provides a rough sketch of its client relationships, including its relationships with corporate clients. On the asset side of the balance sheet are loans - from large, term loans for companies making acquisitions, to revolving credit facilities that are drawn upon, to credit lines covering custody activity or letters of credit. Kale, Eken and Selimler, 2015 stated that sustainability and development of an economy is closely related with a sound and healthy banking sector. Therefore, the soundness of the banking system has always been a key issue not only for domestic governments but also for international regulatory bodies and organizations. Banks function in a dynamic environment and the accelerating technological developments, innovations, and new experiences lead new rules and regulations to come into the daily life of banks. It is obvious that the banking sector is affected from all new external and internal factors, naturally, each bank to a different extent

A corporation's cash deposits sit on the liability side of the bank's balance sheet, held by the bank overnight or longer term as corporate treasurers seek safety and returns or need to keep cash at the bank to be used as collateral or to cover, for example, custody transactions. By targeting the balance sheet, new regulations will create a unique balancing act in which banks seek to build and maintain these elements of corporate client relationships while trying to meet regulatory requirements and earn sufficient income on their assets to create value for their investors (Cruikshank, 2015).

Private Banks in all regions are increasingly burdened by risk and regulatory requirements, in fact more so than any other segments within banking. Regulations span numerous dimensions and serve various objectives including investor protection, financial crime prevention, capital adequacy management, taxation compliance, professional code of conduct, and risk management (Mahieddine and Tong, 2017). Athanasoglou et al. (2006) stated that the importance of banks is more pronounced in developing countries because financial markets are usually underdeveloped, and banks are typically the only major source of finance for the majority of firms and are usually the main depository of economic savings.

The special role that banks play in the economic system implies that banks should be regulated and supervised not only to protect investors and consumers but also to ensure systemic stability. More specifically, bank regulations exist for safeguarding the industry against systemic risk, protecting consumers from excessive prices or opportunistic behavior and finally to achieve some social objectives, including stability (Llewellyn, 1999). Last but not least regulation is important for the efficiency of the banking industry. In this respect, it is noticeable that whenever regulation is implemented with the aim of restricting or limiting banking activities, the banks' conduct of business and the efficiency with which they operate will be affected. This in turn could induce banks to engage in riskier activities and /or to invest in ways to circumvent regulation. According to some studies, it could even ultimately affect economic growth (Jalilian et al., 2007).

The recent economic crises have revealed the importance of bank regulations to hedge against the high risk attributed to imbalances in banks' balance sheets. Nonetheless, excessive regulations may have adverse effects. On the one hand, they serve as prudential measures that mitigate the effects of economic crises on the stability of the banking system and subsequent accompanying macroeconomic results. On the other hand, excessive regulations may increase the cost of intermediation and reduce the profitability of the banking industry. Simultaneously, as banks become more constrained, their ability to expand credit and contribution to economic growth will be hampered (Naceur and Kandil, 2011).

Barth et al. (2013b) examined whether bank regulation, supervision and monitoring enhanced or impeded banks' operating efficiencies based on three worldwide surveys sponsored by the World Bank. They found that: Tighter restrictions on bank activities were negatively associated with banks' efficiencies, while greater capital regulation stringency was marginally and positively associated with banks' efficiencies. They also found that a strengthening of official supervisory power was positively associated with bank efficiency only in countries with independent supervisory authorities. Moreover, independence coupled with a more experienced supervisory authority tends to enhance bank efficiency. Finally, market-based monitoring of banks in terms of more financial transparency was found positively associated with bank efficiency.

Delis et al. (2011) examined the relationship between the regulatory and supervision framework and the productivity of banks. Their findings indicated that regulations and incentives that promote private monitoring and restrictions on banks' activities (securities, insurance, real estate and ownership of non-financial firms) had a positive impact on efficiency. On the other hand, regulations relating to capital requirements and official supervisory power did not have a significant impact on productivity. Demirgue et al. (2004) report a positive and significant association between net interest margins and restrictions on activities. Finally, Pasiouras (2008) finds no significant association of restrictions on activities with technical efficiency. Given the impact reported in the majority of the studies, we expect bank performance to be influenced by restrictions on their activities, although the extent and direction of this influence is difficult to predict.

Despite, the fact that regulations for banks are being rewritten in response to the global financial crisis, their implementation requires complex steps depending on each country's policies and they could have very different effects on bank performance depending on institutional environment where banks operate. Furthermore, the existing empirical evidence is inconclusive about the impact of regulatory and supervisory policies on bank performance.

The financial sector in Ethiopia is composed of the banking industry, insurance companies, microfinance institutions, saving and credit cooperatives and the informal financial sector. The banking industry accounts for about 95% of the total financial sector assets, implying that the financial sector is undeveloped, and activities that banks could perform are legally limited, which in turn contribute to lesser contestability (Zerayehu, Kagnew and Teshome, 2013).

Private commercial banks have emerged in Ethiopian economy since the downfall of the Derge regime in 1991. That time was the turning point to Ethiopian government to open the market for private commercial banks. The current government of Ethiopia has implemented a number of reforms to improve the performance of the banking sector. Hence, many changes have been seen in the sector.

Despite the vital importance of the banking industry for the economy, National Bank of Ethiopia is tightening the directives for regulation and supervision from time to time. These directives aimed at minimizing the risk of the financial sector and the economy from

dynamical changing global and domestic environment, but the directives are forcing the

industry to operate with lower efficiency (Asayehgn and Admassu, 2014; Getenet 2014;

Eden, 2014 and Eskinder, 2015). Hence, this study aimed to examine the role of National

Bank regulations on the performance of infant private commercial banks especially on

Addis International Bank Share Company.

1.2. Background of the Bank

Addis international Bank S.C. (AdIB) is established by diversified groups of shareholders,

Cooperatives, Micro Finance Institutions (MFIs), Iddirs, other business organizations and

individual citizens. The major shareholders of the Bank are Cooperatives and their

members (AdIB, 2016).

The Cooperatives are mainly engaged in the provision of financial services, export

business, manufacturing and services. The members of the major shareholders are mainly

low and middle income citizens. The Micro Finance Institutions also address the financial

needs of the "Unbanked" citizens.

1.2.1. Company core strategy and value

Vision: To be the leading inclusive Bank in Africa

Mission: To provide efficient and effective full-fledged banking services to all income

groups of the society by deploying qualified and motivated staff, and state-of-the-art

technology and thereby optimizing shareholders' interest.

Value: Innovation, Excellence, Integrity, Confidentiality, Teamwork, Diligence, Social and

Responsibility.

1.2.2. Shareholders

Group of Saving and Credit Cooperatives in the City of Addis, organized under Addis

Saving & Credit Cooperatives (AASCCU) initiated the process of establishing a

cooperative bank known by the name Addis Cooperative Bank S.C. The number of

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founders that took the responsibility of organizing the bank was 21 and out of this 67% came from AASCCU.

The first General Assembly of the bank met on February 14, 2002 (Ethiopian Calendar) in the millennium Hall with shareholder owning Birr 152,723,000 and 106,324,040 subscribed and paid up capital respectively. Out of the total paid up capital 64.32% is owned by corporate shareholders (Cooperatives 48.04%, Share companies 11.13%, Iddirs 3.30%) and the rest 35.69% by individual shareholders.

All in all an estimated 63.34% of bank's paid up capital is owned by Cooperatives and their members. The direct and the indirect owners of the bank are estimated at 200,000 individuals. The owner cooperatives are engaged in saving and credit, distribution of consumer item, coffee marketing etc. Four unions (two coffee farmers, two saving and credit cooperative unions) are among the major shareholders of the bank. At primary levels, saving and credit cooperatives of employees of the governmental and nongovernmental organizations.

Besides cooperatives, Addis Saving and credit Share Company, Peace and Gasha Micro finance institutes are also another category of the banks owners. Several individual investors engaged in various business activates are also owners AdIB.

1.2.3. Products and Services

The bank offers different products and services to its customers. The main products and services are Deposit Saving Account, Special Saving Account, Special Demand Deposit Account, the Fixed or Time Deposit Account, Checking Account/Demand, Loans and Advances, Term Loan, Revolving Export Credit facility, Pre-shipment Export credit facility, Import Letter of Credit, Overdrafts, Merchandise Loan, Letter Of guarantee, International Banking, Foreign Exchange Permits, Trade Service, Foreign Bureau, N/R and FCY Accounts, Money Transfer, Internet Banking, SMS Banking, ATM/POS Banking, Mobile Banking and Agent banking.

1.3. Statement of the Research Problem

In modern times, commercial banking occupies quite important place in every economy. If the banking industry does not perform well, the effect to the economy could be huge and broad, because, banks are the critical part of financial system, play a pivotal role in contributing to a country's economic development (Rasidah and Mohd, 2011). According to Barth et al., (2006) that the financial sector is one of the most heavily regulated sectors in the economy and banking is by far the most heavily regulated industry. Bank regulation typically refers to the rules that govern the behavior of banks, whereas supervision is the oversight that takes place to ensure that banks comply with those rules.

In accordance with Article 55(1) of the constitution of the Federal Democratic Republic of Ethiopia, the NBE is established to control the financial system and monetary policy of the country. Hence, National Bank Ethiopia has been formulating different directives to regulate and supervise private commercial banks. The directives primarily aimed at minimizing risk and maintaining the profitability of the banking industry. In addition, the directives are issued to conduct the monetary policy. Hence, these have potential to improve the efficiency of the economy. In fact, some of directives have been achieving significant positive impact on the performance of private commercial banks and in the economy.

Recently, National Bank of Ethiopia has been formulating, updating and changing the directives from time to time considering the current highly dynamic global economic environment as well as the country itself in order to protect the financial sector from failure. However, these directives are becoming stringent and do not consider the performance of elder and infant private commercial banks. Further, these directives put all banks in one basket despite their market share and profitability. Private Banks that have been established in 1990s' have long experience and able to cope up with different directives of NBE that have formulated at different time. However, infant banks that have been established in 2000s' will not have the capacity and the ability to cope up with different directives of NBE that have formulated at different time as elder private commercial banks.

According to World Bank (2009), report stated that the government of Ethiopia continues to implement repressive policies that negatively affect the performance of money and foreign exchange markets and weaken private commercial banks. In addition to controlling interest rates on deposits, the government interferes with the credit allocation decisions of private banks.

Most of the researches conducted on the relationship between banks regulation and bank performance of commercial banks have been conducted in the developed countries (Delis et al., 2011; Gaganis and Pasiouras, 2013; Barth et al., 2013b and Naceurand Kandil, 2011). In Ethiopia, there are also few empirical researches conducted on the impact of National Bank of Ethiopia regulations and the performance of Private commercial Banks (Eden, 2014 and Eskinder, 2015). However, none of these researches considers the role of NBE regulations on the performance of newly established private commercial banks either separately or by comparing with the elder private commercial banks.

After detail review of related literatures, the researcher identified that a gap has exit regarding the topic of this study. Many researchers have been conducted on the impact of national banks regulatory and supervision practices on commercial banks. However, there is no study conducted to assess the impact of national bank regulations on the performance of newly established bank. In Ethiopia, there is no empirical study, which is conducted in this area mainly on newly established private commercial banks. Therefore, this study examines the role of the directives on the performance of Addis International Bank.

1.4. Research Questions

Based on the statement of the research problem, this study answered the following research questions:

- How Does capital increase requirement set by NBE affect the performance of Addis International Bank?
- What is the effect of continuous increases in branch expansion on the performance of Addis International Bank?
- What is the effect of interest rate setting by NBE on the performance of Addis International Bank?

• How does the continuous increases in reserve requirement affect the performance of Addis International Bank?

1.5. Objective of the Study

1.5.1. General Objective

The general objective of this study was to examine the role of National bank of Ethiopia regulation on the performance of Addis International Bank Share Company.

1.5.2. Specific Objectives

This study conducted to examine the following specific objectives:

- To examine the effect of capital increase requirement set by NBE on the Performance of Addis International Bank.
- To assess the effect of branch expansion on the Performance of Addis International Bank.
- To examine the effect of interest rate setting on the performance of Addis International Bank.
- To assess the effect of reserve requirement increase on the Performance of Addis International Bank.

1.6. Research Hypothesis

The study tests the following hypothetical statements to provide answer to the questions stated above:

H1: Capital increase requirement has no significant role on the performance of Addis International Bank.

H2: Branch expansion has no significant role on the performance of Addis International Bank.

H3: Interest rate setting has no significant role on the performance of Addis International Bank.

H4: Reserve requirement increase has no significant role on the performance of Addis International Bank.

1.7. Significance of the Study

The study would have major significance for Investors, Policy makers, Banks and academic purpose. For policy makers, the study assists NBE regulations to have deep understanding during policy formulation on the effects of infant and elder private commercial banks separately. For investors, the study would give clear understanding about the situations during investment decision. For banks, the study would give the managements and employees to have wider understanding of regulations and their effects, and to cope up with such problems. For academic purpose, the study would fill the gap on this specific study area.

1.8. Scope/Delimitation of the Study

This study assessed the role of NBE regulations on the performance of private commercial banks focusing on newly established private commercial bank focusing on Addis International Bank S.C. Therefore, the scope made to infant private commercial banks established in Ethiopia, specifically on Addis International Bank S.C. In addition, the study reviewed audited financial statement of the bank from 2012 to 2016 G.C.

1.9. Limitation of the Study

To collect data and information from the bank was a great challenge, because of confidentiality of the required data and information. The researcher managed to obtain the data from the bank. The study was further constrained by limited financial and time resources. The researcher had scheduled time and budget that enable the study to be completed using the budget drawn and within the required time of the study. It was difficult to meet senior managers in order to allow me to get data from the finance department. These limitations would create an implication on the findings and the conclusion of the study.

1.10. Operational Definition of Key Terms

Capital Requirement (CR): Represent amount of forced bill purchase by the bank, which is measured as log of investment in NBE-Bills.

Branch Expansion (BE): this refers as annual branch expansion rate by set by NBE. It is represented by the number of new branches opened annually

Interest Rate: This refers as interest rate setting by NBE. Since it is difficult to quantify the researcher has try to see its effect on performance through considering as dummy variable. (One for time periods where credit cap was enforced 0 otherwise).

Reserve Requirement (RR): is a portion of bank's asset in National Bank of Ethiopia with no interest and it will be proxy by ratio of reserve account in NBE to total assets.

1.11. Organization of the Study

This research is organized in five chapters. Chapter one provides the general introduction about the entire research. Chapter two describes the review of related literatures. Chapter three provide detail description of the researcher design and methodology employed by this research. Chapter four contains data presentation, analysis and interpretation. Finally, the last chapter contain conclusion of the research and gives relevant recommendations based on the findings of the research.

CHAPTER TWO

RELATED LITERATURE REVIEW

2.1. Theoretical Literature

To explain the relationship between regulation and commercial banks performance, several theories have been advanced. Banking regulations have attracted both theoretical and empirical interest, and several studies attempt to assess whether and how the regulatory framework influences the performance and behavior of banks (Herring, 2005).

The following section will describe and discuss different theories such as Agency theory, economic theory and liquidity theory.

2.1.1. Agency Theory

Agency theory deals with two problems in agency relationship (Jensen and Mecling 1976). The first is the agency problem that arises when the goals of the principal and the agent are conflict and when it is difficult for the principal to verify what the agent is doing. The credit relationship can be likened to an agency relationship by which the creditor(the principal) "says" some of his wealth to debtors (agents) who are committed to him capital repayments and interest costs with the conditions established in a contract previously established between the two parties. One can thus infer a divergence of interest between creditor and debtor. The former want the repayment of capital borrowed and the latter want to maximize the profitability of it. This problem is worse when information asymmetry is exaggerated. In the general finance system and in the bank regulation in particular, information asymmetry problems are bigger than in other sectors. Howels and Bain (2004) stated that the reason for bank regulation originates from the existence of asymmetric information the fact that the customers of banks are less informed and thus more at a disadvantage about the affairs of the banks than the bank itself.

2.1.2. Economic Theory

Regulation consists of rulemaking and enforcement. Economic theory offers two complementary rationales for regulating financial institutions. Altruistic public theories treat rules as governmental instruments for increasing fairness and efficiency across the society as a whole.

Agency cost theory recognizes that incentive conflicts and coordination problems arise in multiparty relationship and that regulation introduces opportunities to impose rules that enhance the welfare of one sector of society at the expense of another (Diamond and Dybvig, 1983). Each rationale sets different goals and assigns responsibility for choosing and adjusting rules differently. Altruistic assign regulation to governmental entities that search for market failures and correct them. It is taken for granted that we may rely on a well-intentioned government to use its discretion and choose actions for the common good. (Jensen and Michael, 1994). Agency-cost theories portray regulation as a way to raise the quality of financial services by improving incentives to perform contractual obligations in stressful situations. These private benefits theories count on self-interested parties to spot market failures and correct them by opening more markets. In financial services markets for regulatory service create outside discipline that controls and coordinates industry behavior. Institutions benefit from regulation that: enhances customer confidence; increases the convenience of customer transactions; or creates cartel profit. Agency-cost theories emphasize the need to reconcile conflicts between the interests of institutions, customers, regulators and taxpayers (Edwards, 1997).

2.1.3. Liquidity Theory

Holmstom and Tirole (1998) provided a theory of liquidity in a model in which intermediaries have borrowing frictions. In their Model, a government has an advantage over private markets because it can enforce repayment of borrowed funds while the private markets because it can enforce repayment of borrowed funds while the private lenders cannot. They show that availability of government provided liquidity leads to a Pareto improvement where there is aggregate uncertainty. They further argue that the role of the

government is thus to correct any inefficiencies arising from externalities and private information and possibility of hidden trades.

2.2. The Role of Central Banks

The Central Bank is the head of the financial system. Financial institutions including commercial banks are regulated and monitored by the Central Bank. Most countries have some form of Central Bank serving as the principle authority for the nation's financial matters. Primary duties for a Central Bank include fiscal and monetary policy. Fiscal policy refers to the economic direction a government wishes to pursue regarding taxation, spending, and borrowing. Monetary policy is the set of actions a government or Central Bank takes to influence the economy in an attempt to achieve its fiscal policy. Implement a monetary policy that provides consistent growth and employment. Promote the stability of the country's financial system. Manage the production and distribution of the nation's currency. Central Banks have several options they can use to affect monetary policy, but the most powerful tool is their ability to set interest rates.

A primary role for most Central Banks is to supply operational capital to the country's commercial banks. This is done by offering loans to these banks for short time periods usually on an overnight basis. This ensures the banking system has sufficient liquidity for businesses and individual consumers to borrow money, and the availability of credit has a direct impact on business and consumer spending.

The Central Bank charges interest on the short-term loans it provides. The rate charged by the Central Bank affects the interest rate that the banks charge their customers as the banks must recover their cost (the interest they paid) plus earn a profit.

Central Banks use the relationship between the short-term rates at which it offers loans, and the interest rate the banks charge, as a way to influence the cost for the public to borrow money. If the Central Bank feels that an increase in consumer spending is needed to stimulate the economy, it can lower short-term rates when providing loans to the commercial banks. This usually results in the banks lowering the interest they charge, making borrowing less costly for consumers which the Central Bank hopes will lead to an increase in overall spending. If a tightening of the economy is needed to slow inflation, the

Central Bank can increase interest rates making loans more expensive to acquire, which could lead to an overall reduction in spending.

2.2.1. Supply and Demand of Currency

Just like any commodity, the value of a free-floating currency is based on supply and demand. To increase a currency's value, the Central Bank can buy currency and hold it in its reserves. This reduces the supply of the currency available and could lead to an increase in valuation. To decrease a currency's value, the Central Bank can sell its reserves back to the market. This increases the supply of the currency and could lead to a decrease in valuation. International trade flows can also influence supply and demand for a currency. When a country exports more than it imports (a positive trade balance), foreign buyers must exchange more of their currency for the currency of the exporting country. This increases the demand for the currency.

2.3. Objectives for Financial Regulation

Llewellyn (1998) highlights three core objectives of regulation as; to sustain systemic stability; to maintain the safety and soundness of financial institutions and to protect the consumer. His argument is that the objectives depend on various market imperfections (especially externalities and asymmetric information which in the absence of regulations, produce sub-optimal results and reduce consumer welfare.

2.3.1. Prudential Regulations

There is also a case for prudential regulation that is for safety and soundness by reducing the probability of banks failing, which is independent of any systemic dimension. There are costs associated with financial institution failures, which are different from systemic costs. In the absence of one involved.

2.3.2. Minimum Capital

The first prudential standard is the minimum amount of liquid capital that banks should raise to entry the regulated market (Staschen, 2003). This requirement is an absolute measure of solvency and is usually established by primary regulation (Staschen, 2003). It is

justified on the grounds of influencing the structure of the financial system. It serves as a cushion in periods when the institution shows an unhealthy situation due to its own performance or to exogenous factors such as economic downturns (Christen et al., 2003).

Some argue that the high minimum capital requirements could act as barriers to market entry to possible new players that are not able to raise capital for the initial stages as a regulated institution (Janson, 1997). However, on the other hand, a high minimum capital requirement could help to mitigate moral hazard behavior among shareholders (Janson et al, 2004). In addition, a high minimum capital requirement is often seen as one tool for limiting the number of institutions that the supervisory body should be responsible for monitoring, especially if the supervisory resources are scarce (Schmidt, 2000).

2.3.3. Capital Adequacy

Capital adequacy refers to a relative measure: it establishes the maximum level of leverage that a financial institution is allowed to reach on its operations (Jansen, 1997). It is measured by the ratio of risk weighted assets relative to regulatory equity, which has been internationally recommended to be equal to 12.5 times, or commonly known as a capital adequacy of 8% (Janson, 1997). Nonetheless, it has to be remembered that this prudential standard proposed by the Basel Committee was intended to be applied to international and large banking institutions from developed countries, and that it has been translated to several financial systems in developing countries despite the well-known differences in institutional risk profile, scale of operations and national economic environments (Guidottiet al, 2004; Janson, 1997).

2.4. Regulation Commercial Banks

Regulation refers to the set of laws and rules applicable to banking, and supervision is defined as the monitoring by authorities of banks" activities and the enforcement of banking regulations (Barth et al., 2003). Banks have a pivotal position in the economy for two reasons: they are the only source of finance for a large number of borrowers (Bernanke, 1983) and, more importantly, the resultant financial disruption is likely to be more serious than would be the case with other sectors of the financial system.

2.4.1. Regulation of Commercial Banks

Greenidge and Browne (2000) refer financial regulation to a process in which there is a monitoring of the financial institutions by a body that is directed by the government in an effort to achieve macroeconomic goals through monetary policies as well as other measures permissible by law. Thus regulations are concerned, they must be extensively considered and skillfully administered because in appropriate or ineffective regulatory measures results in catastrophic economic problems.

Traditional approaches to bank regulation emphasize the positive features of capital adequacy requirements (Dewatripont and Tirole, 1994). Capital serves as a buffer against losses and hence failure. Furthermore, with limited liability, the proclivity for banks to engage in higher risk activities is curtailed with greater amounts of capital at risk. Capital adequacy requirements, especially with deposit insurance, play a crucial role in aligning the incentives of bank owners with depositors and other creditors (Berger et al., 1995, and Keeley and Furlong, 1990).

Casu et.al. (2006), pointed out the main reasons for financial sector regulation are to ensure systemic stability; to provide smaller, retail clients with protection; and to protect consumers against monopolistic exploitation. Banking laws and regulations extend too many aspects of banking, including who can open banks, what products can be offered, and how banks can expand. According to Spong (2000), the accepted goals of bank regulation are Protection of depositors, Monetary and financial stability, efficient and competitive financial system and Consumer protection.

Banking regulation originates from microeconomic concerns over the ability of bank creditors (depositors) to monitor the risks originating on the lending side and from micro and macroeconomic concerns over the stability of the banking system in the case of a bank crisis. In addition to statutory and administrative regulatory provisions, the banking sector has been subject to widespread "informal" regulation, i.e., the government's use of its discretion, outside formalized legislation, to influence banking sector outcomes (for example, to bail out insolvent banks, decide on bank mergers or maintain significant State ownership) (Bonn, 2005). Further, Bonn (2005) stated that Banks in one form or another have been subject to the following non exhaustive list of regulatory provisions;

- 1. Restrictions on branching and new entry
- 2. Restrictions on pricing (interest rate controls and other controls on prices or fees)
- 3. Line-of-business restrictions and regulations on ownership linkages among financial institutions
- 4. Restrictions on the portfolio of assets that banks can hold (such as requirements to hold certain types of securities or requirements and/or not to hold other securities, including requirements not to hold the control of non financial companies)
- 5. Compulsory deposit insurance (or informal deposit insurance, in the form of an expectation that government will bail out depositors in the event of insolvency)
- 6. Capital-adequacy requirements
- 7. Reserve requirements (requirements to hold a certain quantity of the liabilities of the central bank)
- 8. Requirements to direct credit to favored sectors or enterprises (in the form of either formal rules, or informal government pressure)
- 9. Expectations that, in the event of difficulty, banks will receive assistance in the form of "lender of last resort"
- 10. Special rules concerning mergers (not always subject to a competition standard) or failing banks (e.g., liquidation, winding up, insolvency, composition or analogous proceedings in the banking sector)
- 11. Other rules affecting cooperation within the banking sector (e.g., with respect to payment systems).

According to Barth et al. (2005), that there are five main theoretical reasons for restricting bank activities and banking commerce links. First, conflicts of interest may arise when banks engage in such diverse activities as securities underwriting, insurance underwriting, and real estate investment. Such banks, for example, may attempt to "dump" securities on ill-informed investors to assist firms with outstanding loans. Second, to the extent that moral hazard encourages riskier behavior, banks will have more opportunities to increase risk if allowed to engage in a broader range of activities. Third, complex banks are difficult to monitor. Fourth, such banks may become so politically and economically powerful that they become "too big to discipline." Finally, large financial conglomerates may reduce

competition and efficiency. According to these arguments, governments can improve banking by restricting bank activities.

There are alternative theoretical reasons for allowing banks to engage in a broad range of activities, however. First, fewer regulatory restrictions permit the exploitation of economies of scale and scope (Claessens and Klingebiel, 2000). Second, fewer regulatory restrictions may increase the franchise value of banks and thereby augment incentives for more prudent behavior. Lastly, broader activities may enable banks to diversify income streams and thereby create more stable banks (Bartl et al., 2005).

If equity capital is more expensive to rise than deposits, then an increase in risk-based capital requirements tends reduce banks' willingness to screen and lend. In a general equilibrium context, Gorton and Winton (2000) show that raising capital requirements forces banks to supply fewer deposits, which reduces the liquidity-providing role of banks.

Countries adopt deposit insurance schemes to prevent widespread bank runs. If depositors attempt to withdraw their funds all at once, illiquid but solvent banks may be forced into insolvency. To protect payment and credit systems from contagious bank runs, many favor deposit insurance *plus* powerful official oversight of banks to augment private sector monitoring of banks (Barth et al., 2005).

Deposit insurance schemes come at a cost, however. They may encourage excessive risk-taking behavior, which some believe offsets any stabilization benefits. Yet, many contend that regulation and supervision can control the moral-hazard problem by designing an insurance scheme that encompasses appropriate coverage limits, scope of coverage, coinsurance, funding, premia structure, management and membership requirements (Dewatripont and Tirole, 1994).

2.4.2. Bank Regulation and Financial Performance

One key component to any financial market is the banking system. Banks facilitate financial development by mobilizing and allocating funds to investment projects with the greatest long term economic benefits. Moreover, it is widely acknowledged that a well structured banking system, defined by its supervisory practices, risk taking, and governance, promotes greater financial performance and economic stability (Caprio and

Levine, 2006). Promoting sound banking practices, however, has proven to be difficult. Differences with respect to corruption, democracy, and legal origin, for example, create heterogeneous regulatory environments that impede the implementation of universally effective policies. The intent of this study is to empirically assess the relationship between a national bank regulations and performance of Addis International Bank S.C.

Effective bank regulation has two main objectives: the first is to protect private interests of depositors, investors, and creditors; the second is to safeguard public or collective interest by promoting the integrity and reputation of financial services markets. The wave of deregulation of the financial services in the 1980s and the recent globalization of the industry have both counterbalanced by a rise in regulations and enforcement actions (Gully, 2005).

Giddy (1984) and Sheng (1999) provide four major reasons why banks should be regulated. The first relates to monetary policy – the ability of banks to create money. Second, as channels of credit or investments, banks are involved in credit allocation. Third, banks are regulated to ensure healthy competition and innovation by preventing the formation of cartels. The fourth is for prudential regulation reasons and to mitigate the problem of asymmetric information. This view is supported by Howells and Bain (2004) who stated that the reason for bank regulation originates from the existence of asymmetric information the fact that customers of the institutions (banks) are less informed and thus more at a disadvantage about the affairs of the banks than the bank itself.

2.4.3. Determinants of Performance of Banks

Terance (1989) defines performance measurement as a way of ensuring that resources available are used in the most efficient and effective way. The essence is to provide for the organization the maximum return on the capital employed in the business. Financial performance for banks is very important because managers need to know how well the banks are performing.

Most studies divide the determinants of commercial banks performance into two categories, namely internal and external factors. Internal determinants of profitability, which are within the control of bank management, can be broadly classified into two

categories, i.e. financial statement variables and nonfinancial statement variables. While financial statement variables relate to the decisions which directly involve items in the balance sheet and income statement; non-financial statement variables involve factors that have no direct relation to the financial statements. The examples of non-financial variables within the this category are number of branches, status of the branch (e.g. limited or full-service branch, unit branch or multiple branches), location and size of the bank. Haron, (2004), External factors are those factors that are considered to be beyond the control of the management of a bank. Among the widely discussed external variables are competition, regulation, concentration, market share, and ownership, scarcity of capital, money supply, inflation and size.

2.5. Overview of Ethiopian Financial and Banking Sector

2.5.1. Background of Ethiopia Financial Sector

Traditional financial system in Ethiopia has long history and paramount contribution to economic betterment and social wellbeing of the society. Traditional institutions organized with a sense of cooperation and risk sharing has enabled Ethiopians to experience saving and financial management within its cultural context, equb and edir are some of the informal financial institutions (Eskinder, 2015).

One can trace the history of using modern money in Ethiopia to more than 2000 years (Pankhrust in Belay, 1990). This had flourished in what is called the Axumite era, which can stretch from 1000 BC to around 975 AD. Leaving that long history aside, modern banking in Ethiopia started in 1905 with the establishment of Abysinian Bank based on a 50 years agreement with the Anglo-Egyptian National Bank. In 1908 a new development bank (named Societe Nationale d'Ethiope Pour le Development de l' Agriculture et du Commerce) and two other foreign banks (Banque de l'Indochine and the Compagnie de l' Afrique Oreintale) were also established (Pankhrust (1968) cited in Befekadu, 1995). These banks were criticized for being wholly foreign owned. In 1931 the Ethiopian government purchased the Abysinian Bank, which was the dominant bank, and renamed it the 'Bank of Ethiopia' – the first nationally owned bank on African continent (Belay, 1990 and Befekadu, 1995).

During the five-years of Italian occupation there was an expansion of banking activity. In particular the Italian banks were active. After independence from Italy's brief occupation (of 1933-1941) where the role of British was paramount owing to its strategic consideration in World War II, Barclay's bank had established and was in business in Ethiopia from 1941 to 1943 (Belay, 1990 and Befekadu, 1995). Following this, in 1943, the Ethiopian government established the "State Bank of Ethiopia". The establishment of this Bank by Ethiopia was a painful process since Britain was against it (Befekadu (1995) for an interesting neo-colonial story). This bank was operating both as commercial and central bank until 1963 when it was dissolved into today's National Bank of Ethiopia (the central bank, reestablished in 1976) and "The Commercial Bank of Ethiopia", CBE henceforth.

All privately owned financial institutions including three commercial banks, thirteen insurance companies and two non-bank financial intermediaries were nationalized on 1 January 1975. The nationalized banks were reorganized and one commercial bank (the Commercial Bank of Ethiopia), a National Bank (recreated in 1976), two specialized banks (the Agricultural and Industrial Bank – renamed recently as the Development Bank of Ethiopia; and a Housing and Saving Bank – renamed recently as the Construction and Business Bank) as well as one insurance company – Ethiopian Insurance Company were formed. Following the regime change in 1991 and the liberalization policy in 1992, these financial institutions were reorganized to work on market-oriented policy framework. Besides, new privately owned financial institutions were also allowed to work along the publicly owned ones (Alemayehu, 2006).

2.5.2. Ethiopian Financial Sector in the Post-reform Period

Proclamation No. 84/1994 that allows the private sector to engage in the banking and insurance businesses and proclamation no. 40/1996 in 1996 that allows the establishment of MFIs mark the beginning of a new era in Ethiopia's financial sector and opened the opportunity for an inclusive financial sector in Ethiopia.

Currently, the Ethiopian financial sector consists of 3 public banks1 including the Development Bank of Ethiopia (DBE), 16 private banks, 14 private insurance companies, 1 public insurance company, 31 microfinance institutions and over 8200 Saving and Credit

Cooperatives (SACCOs) in both rural and urban areas. The ownership structure of microfinance institution is mixed, with the big microfinance institutions partially owned by regional states, some by NGO's and some by private owners. The government-owned Commercial Bank of Ethiopia (CBE) is the dominant commercial bank and accounts for 70% of total assets of banks as of May 2013 (IMF, 2013). The balance, 30%, is accounted by the other 15 banks. Unlike many government-owned commercial banks, CBE is relatively well run and profitable.

The entry of the private sector in the financial sector has created better opportunities for enhanced access to financial services in the country directly through their operations and indirectly through the spillover effect on public financial institutions (Getenet, 2014). As argued by Getahun (2009) the emergence of private banks with the spirit of competition and emphasis on profitability has led to major shift in the focus of public banks towards a more profit oriented approach. According to him, the Government has restructured these banks granting full operational autonomy, recapitalizing them and cleaning their balance sheets from bad debts accumulated in the previous socialist directed credit delivery system.

According to Getenet (2014), which despite those encouraging changes in its structure, the Ethiopian financial sector is not diversified in terms of the type of institutions delivering the service and the type of financial products being delivered. The financial service is dominated by a cash based system. Moreover, there is no stock market and the financial market comprising the interbank money and foreign exchange markets as well as the bond and TBs market is at an infant stage accommodating limited amount of transactions.

It is worth highlighting that the financial sector in Ethiopia is highly regulated and completely closed from foreign companies. The complete closure of the financial sector to foreign companies has limited the opportunities for competition in the financial sector. In addition, there will be a missed opportunity in terms of capital injection, foreign exchange access and banking technology and skills. The GoE has been trying to justify such a closure on account of possible domination of the financial sector by foreign banks as the former is quite at its infant stage and the regulatory capacity of the central bank is quite limited (Getenet, 2014).

The Ethiopian financial sector is shallow (African Economic Outlook, 2012) and the coverage of financial services in Ethiopia is low (AfDB, 2011). Currently, the banking sector in Ethiopia is in a rudimentary and fragile state. It is small, relatively undeveloped, closed and characterized by a large share of state ownership. The state- owned commercial banks account for nearly two-thirds of the banking sector assets (Admassu and Asyehne, 2014).

Over the past decade, Ethiopia has achieved impressive economic growth averaging close to 11 percent annually (WB, 2013). The development of a vibrant and active private banking system that complements existing public sector work is considered important to Ethiopia's economic progress by a range of experts, including the World Bank, the African Development Bank, and the International Monetary Fund. These bodies view the expansion of the private banking system in a prudent and controlled manner as key to the success of Ethiopia's "Growth and Transformation Plan (GTP)," an ambitious five-year development plan launched in 2010 to assist the country in reaching "middle income" status (Keatinge, 2014).

Compared to most countries, Ethiopia has taken a cautious approach toward the liberalization of its banking industry. For all intents and purposes, its industry is closed and generally less developed than its regional peers. The industry comprises one state-owned development bank and 18 commercial banks, two of which are state-owned, including the dominant Commercial Bank of Ethiopia (CBE), with assets accounting for approximately 70 percent of the industry's total holdings (IMF, 2013). The banking industry's nonperforming loan ratio is commendably low, and profitability is good, but the dominance of public sector banking certainly restricts financial intermediation and economic growth. It contrasts with regional and international peer countries where banking industries have a much higher share of private sector and foreign participation (World Bank, 2013).

Legitimate concerns have been expressed about allowing domestic banking expansion and the increased entry of foreign capital into Ethiopia. Such measures could result in destabilizing disruption caused by "hot money" flows and skewed allocation of credit toward more-attractive borrowers, such as larger industrial companies that already have access to bank lending, rather than smaller-scale enterprises (so-called cherry picking)

(Kiyota et al., 2007). As demonstrated by the 2008 global financial crisis, uncontrolled banking expansion can be highly damaging for economies, particularly within the current globalized financial system.

Yet, controlled development and expansion of private sector banking, including the admission of foreign capital and operators, can deliver meaningful benefits to a country such as Ethiopia. These benefits may include improvements in the overall efficiency of the sector, the transfer of skills for employers and regulators, and greater financial stability by reducing the need for cross-border flows (Bonin, Hasan and Wachtel, 2005). Thus, although mismanaged financial development can lead to financial crises, forming policies that promote successful financial development can greatly improve the environment for economic growth (Mishkin, 2007).

2.6. Empirical Literature

A number of empirical studies have sought to estimate the effects of different regulatory and supervision on the performance of commercial banks and show some empirical findings within these areas. This section will be concerned with the relationships between regulation and financial performance of commercial banks.

Lee and Chih (2013) examined the effects of regulations (including imposing stricter requirements on capital bases, leverage, provision and liquidity, known widely as the China version of the new Basel III) imposed by the China Banking Regulatory Commission (CBRC) on efficiencies and risk taking activities of banks. They used a profit model of the DEA in the first stage for the period of 2004-2011, and then used the Tobit regression model to determine the relationship between financial regulation and efficiency, and used the Ordinary Least Squares (OLS) regression model to determine the relationship between regulations and risks. They indicated that big and small banks were differently affected by each regulation ratio and the current ratio did not affect the risk takings by banks.

Aysan and Ceyhan (2008) investigated the effects of some factors on the Turkish banking industry for the period of 1990-2006. They concluded that the branch number had a negative effect on efficiency; both bank capitalization and loan ratios had a positive effect

and foreign ownership was insignificant. They indicated that restructuring attempts during post-crises improved efficiency.

Barth et al. (2013b) examined whether bank regulation, supervision and monitoring enhanced or impeded banks' operating efficiencies based on three worldwide surveys sponsored by the World Bank covering 4,050 banks observations in 72 countries over the period of 1999 – 2007. They applied the DEA in the first stage by intermediation approach to obtain bank efficiency scores and then performed second-stage regressions to examine the relationship between bank regulation, supervision and monitoring, and bank efficiencies. They found that: Tighter restrictions on bank activities were negatively associated with banks' efficiencies, while greater capital regulation stringency was marginally and positively associated with banks' efficiencies. They also found that a strengthening of official supervisory power was positively associated with bank efficiency only in countries with independent supervisory authorities. Moreover, independence coupled with a more experienced supervisory authority tends to enhance bank efficiency. Finally, market-based monitoring of banks in terms of more financial transparency was found positively associated with bank efficiency.

Barth et al. (2012) argued that although many countries had reformed their bank-regulatory regimes in the last twelve years, there was no evidence for better improvements. Many countries had obeyed the Basel guidelines and strengthened capital regulations and empowered supervisory agencies; but existing evidence did not support that this would improve the banking-system stability, enhance the efficiency of intermediation, or reduce corruption in lending.

Gaganis and Pasiouras (2013) investigated the interaction between bank profit efficiency and supervision regime (the central bank's involvement in financial supervision, the unification of financial authorities, and the independence of the central bank), using nearly 4,000 commercial banks operating in almost 80 countries over the period 2000–2006, by employing the stochastic frontier model and intermediation approach. They concluded that:

(a) efficiency decreased as the number of financial sectors that were supervised by the central banks increased; and (b) banks operating in countries with greater unification of

supervisory authorities were less profit efficient and central bank independence had a negative impact on bank profit efficiency.

Delis et al. (2011) examined the relationship between the regulatory and supervision framework and the productivity of banks in 22 countries over the period 1999–2006 with Malmquist index and bootstrap regressions. Their findings indicated that regulations and incentives that promote private monitoring and restrictions on banks' activities (securities, insurance, real estate and ownership of non-financial firms) had a positive impact on efficiency. On the other hand, regulations relating to capital requirements and official supervisory power did not have a significant impact on productivity.

2.8. Conceptual Framework

Figure 1 below presents schematic conceptual framework of the relationship between National Bank regulations and performance of Addis International Bank.

Capital Requirement

Branch Expansion

Return on Asset

Reserve
Requirement

GDP
Inflation
Firm Size

Figure 1: Schematic Conceptual Framework

Source: Own design, 2017

The above figure shows conceptual framework of how all the independent and control variables are related with the dependent variable.

The study used return on assets as, dependent profitability variables. Reserve requirement, capital requirement, branch expansion and interest setting were used as independent variables. In addition, the study used firm size as measured by logarithm of total asset, annual GDP growth rate and inflation rate as control variables.

The four variables of National Bank regulations which are Reserve requirement, Capital requirement, branch expansion and Interest rate setting are used to predict the effect of National Bank regulations on the performance of Addis International Bank S.C.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. Research Design and Approach

Research design is a logical and systematic plan for directing a research study. It specifies

the objectives of the study, the methodology and techniques to be adopted for achieving the

objectives (Mugenda and Mugeenda, 2003). This study employed descriptive research

design. The research design examined the relationship between National Bank of Ethiopia

regulations and the performance of Addis International Bank. According to Mugenda and

Mugeenda (2003), descriptive research is an investigation in which quantity data is

collected and analyzed in order to describe the specific phenomena in its current trends,

current events and linkages between different factors at the current time.

3.1.1. Description of the variables

After reviewing several literatures, the following best-fitted variables selected to measure

the impact of National Bank regulations on the performance of Addis International Bank

S.C. (AdIB). The choices of operational definitions as well as the expected signs of the

study variables are based on previous studies.

Dependent Variable

Return on Assets (ROA)

Among various measures of profitability, ROA is a better one since it relates the

profitability of the business to the asset base, and it is a simplest one to measure the

profitability. It explains the performance and progress of the business in utilizing its

resources to generate the income.

ROA is calculated by the following formula: **ROA = EBIT/TA**

Where:

ROA: Return on Asset;

EBIT: Earnings before Interest and Taxes;

TA: Total Assets

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Independent Variables

In this research the independent variables, Reserve requirement (RR), Branch expansion (BE), Interest rate (IR), Capital requirement (CR) were used to measure NBE regulations.

Capital Requirement (CR): Represent amount of forced bill purchase by the bank, which is measured as log of investment in NBE-Bills.

Branch Expansion (BE): this refers as annual branch expansion rate by set by NBE. It is represented by the number of new branches opened annually

Interest Rate: This refers as interest rate setting by NBE. Since it is difficult to quantify the researcher has try to see its effect on performance through considering as dummy variable. (One for time periods where credit cap was enforced 0 otherwise).

Reserve Requirement (RR): is a portion of bank's asset in National Bank of Ethiopia with no interest and it will be proxy by ratio of reserve account in NBE to total assets.

Control Variables

Control variables play an active role in quantitative studies. These variables are special type of independent variable that is measured in a study because they potentially influence the dependent variable. In this study, the researcher uses firm size, inflation and GDP ratio as a control variable.

The most widely used type of measurement for firm size is the natural logarithm of total asset, which is used by many researchers like Lazaridis & tryfonidis (2006), Padachi (2006) the size of the firm has been measured by the logarithm of its total assets, as the original large value of total assets may disturb the analysis. The variable GDP was also selected as a control variable since change in economic conditions in the country affect the profitability of the Bank. It used as a control variable in Lamberson (1995). The third control variable Inflation was selected as a control variable because according to the recent theory of information asymmetry in the credit market an increase in the rate of inflation drives down the real rate of return not just on money, but on assets in general. The implied reduction in real returns exacerbates credit market frictions. Inflation is calculated based from consumer price index.

3.2. Types of Data and Tool/ Instrument Data Collection

3.2.1. Types of data and Sources of Data

The study used secondary data for the purpose of analyzing the relationship between bank regulation and financial performance Addis International Bank S.C. The secondary data was collected from the financial statements of Addis International Bank S.C. The researcher uses secondary data because of confidentiality of detail data from the researchable Bank.

3.2.2. Instrument of Data Collection

According to Koul (2006), using appropriate data collection tools help researchers to combine the strengths and amend some of the inadequacies of any source of data to minimize risk of irrelevant conclusion. Consistent and reliable research indicates that research conducted by using appropriate data collection instruments increase the credibility and value of research findings. The secondary data collected through structured document reviews from the records held by the Addis International Bank S.C.

3.3. Procedure of Data Collection

The researcher had completed all the necessary activities before the data collection process, which would be helpful for accomplishing the data collection process successfully. The researcher officially requested the bank management to get access for audited financial statements of the bank. During data collection, the researcher assures the bank's management on the confidentiality of the data that they provided. Further, all the necessary ethical issues were consider during the data collection processes by the researcher.

3.4. Methods of Data Analysis

The study used Statistical Package for Social Science (SPSS) to analyze quantitative data. A set of key financial ratios was used to compute for 5 years to highlight the relationship between bank's performance and National Bank of Ethiopia regulations. The patterns in the data have been identified and useful inferences have been studied with a regression approach.

A linear regression model of financial performance versus regulations has been applied to examine the relationship between the variables. The model treats financial performance of Addis International Bank S.C as dependent variable while independent variables are bank regulations. The significance of each independent variable has been tested. Fischer distribution test called F- test has been used to test the significance of the overall model at a 95% confidence level. The equation to investigate the relationship between National Bank of Ethiopia regulations and the bank's performance will be as follows: The researcher used the model that was employed by Akoto, A.V, & Angmor, (2013), Raheman A, (2007). The relationship equation represented in the linear equation below:

ROAit = $\beta 0 + \Sigma \beta$ Xit+ uit (Eq. 3.1)

Where:

ROAit: Return on Asset of firm i at time t.

 β 0: The intercept of equation;

βi: Coefficients of Xit variables;

Xit: The different independent variables for NBE regulations on the firm i at time t (Time);

uit: The error term;

Specifically, the above panel least squares model is converted into specified variables it

becomes:

ROAit=\(\beta 0 + \beta 1 R Rit + \beta 2 C Rit + \beta 3 B E it + \beta 4 I Rit + \beta 5 L O S it + \beta 6 G D P it + \beta 7 I N F it + u it ... (Eq.

3.2)

Where:

 β 0: The intercept of equation; ROA: the return on assets;

RR: Reserve Requirement; CR: Capital Requirement;

BE: Branch Expansion; IR: Interest Rate;

LOS: Natural logarithm of total asset; GDP: gross domestic product;

INF: inflation; uit: The error term;

3.6 Ethical Considerations

The researcher uses a banks information from structured audited data for academic purpose in order to protect the good will and trust of their client.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATIONS

4.1. Descriptive Analysis

Raw data, descriptive statistics and data analysis are presented on this chapter. This study was quantitative in nature and used analysis of secondary data to arrive at various conclusions in order to address the research objectives.

Table 1 shows the descriptive statistics of regulatory variables that all variables namely Capital requirement, reserve requirement, branch expansion and interest rate are normally distributed around the mean with minimum standard deviations. From the total of 5 observations the mean of ROA equals 3.9 with a minimum of 2.2 and the a maximum of 4.6% respectively, that means the bank earned 3.9 cents of net income from a single birr of asset investment. In addition, the table below reveals that ROA distributed around the mean, the variation of ROA is low. The mean of Capital requirement is 8.20701 its maximum, minimum, and standard deviation are 8.659, 7.605 and 0.417319 respectively. Reserve Requirement's minimum, maximum, mean, and standard deviation are 0.004, 0.020, 0.01155 and 0.006239 respectively. For the Interest rate, the mean is 0.0453, maximum 0.06, minimum 0.03 and standard deviation is 0.01338. For the Branch expansion the mean 2.10000E1, maximum 40, minimum 5 and standard deviation is 14.370108.

Table 1: Descriptive statistics of Variables

Descriptive Statistics						
	Minimum	Std. Deviation				
ROA	.022	.046	.03997	.010373		
RR	.004	.020	.01155	.006239		
BE	5.000	40.000	2.100E1	14.370108		
CR	7.605	8.659	8.20701	.417319		
IR	.03	.06	.0453	.01338		
FS	8.63	9.40	9.0665	.29245		
GDP	9.60	10.80	10.0600	.47223		
IFL	7.40	27.00	18.1400	7.17900		

Source: compiled bank data, 2017

4.2. Correlation Analysis

Prior to regression result, it is important to check the correlation between different variables on which the analysis is built. Correlation coefficient indicates the degree of linear relationship between two variables. Table 2 shows the Pearson correlation coefficients between the variables. Returns on assets (ROA) had the positive correlation with the Reserve requirement, capital requirement, Branch expansion, Internet margin, Firms size and GDP with the correlation coefficient of 0.737, 0.711, 0.880, 0.805, 0.896 and 0.81319, respectively. On the other hand, the study showed that there exists negative relationship between Return on Asset (ROA) and Inflation with correlation coefficient - 0.157, respectively.

Table 2: Pearson Correlation Coefficient

	ROA	RR	BE	CR	IM	FS	GDP	IFL
ROA	1							
RR	0.737665	1						
BE	0.711903	0.435447	1					
CR	0.880569	0.595582	0.959558	1				
IM	0.805563	0.595517	0.977295	0.983715	1			
FS	0.896652	0.548742	0.943129	0.994448	0.963345	1		
GDP	0.81319	-0.72792	-0.44946	-0.62509	-0.52032	-0.62827	1	
IFL	-0.15768	-0.528	0.338784	0.154973	0.136835	0.172589	0.027875	1

Source: compiled bank data, 2017

4.3. Regression Analysis

In this section, the empirical findings on the relationship between National Bank regulator variables and the performance of Addis International Bank S.C presented below in detail.

Table 3: Analysis of Variance – ANOVA

	ANOVA								
Model Sum of Squares Df Mean Square F Sig						Sig.			
1	Regression	1683.079	7	420.7696	10.1795	0.00011			
	Residual	826.6979	20	41.3349					
	Total	2509.776	27						

Source: compiled bank data, 2017

Table 3 shows that the ANOVA result for all variables indicate that there was a significant relationship between the variables at F = 10.17 and p = 0.00011, this implies that there is a

strong relationship between four variables; reserve requirement, capital requirement, interest rate and branch number, and the performance of Addis International Bank S.C.

Table 4: Regression Coefficients

Coefficients								
Model		Unstandardized Coefficients		Standardized Coefficients	Т	Sig.		
		В	Std. Error	Beta				
Variables	(Constant)	0.029	0.007		4.049	0.027		
	BE	0.012	0.005	0.712	1.756	0.044		
	RR	0.026	0.018	0.738	1.792	0.045		
	CR	0.022	0.007	0.771	1.918	0.046		
	IR	0.013	0.005	0.761	1.891	0.031		
	FS	0.021	0.014	0.733	1.781	0.041		
	GDP	0.011	0.004	0.709	1.671	0.031		
	IFL	-0.024	0.017	0.735	1.789	0.012		

Source: compiled bank data, 2017

The regression output is laid on Table 4. The beta coefficients to be used in this study are the unstandardized coefficients. The results indicate that a unit change (1%) in the capital requirement causes an increase of 0.022 (2.2%) change in the return on assets of Addis International Bank S.C. Branch Expansion is also a predictor of performance or return on assets. A unit change (1%) in branch number leads to an increase of 0.012 (1.2%) unit changes in profitability of Addis International Bank S.C. A unit change in interest rate leads to a change of 0.013 (1.3%) changes in the performance (return on assets) of Addis International Bank S.C. Reserve requirement is also a predictor of performance or return on assets. A unit change (1%) in reserve requirement leads to an increase of 0.026 (2.6%) unit changes in profitability of Addis International Bank S.C.

In terms of significance of each of the predictors, a t-test statistics has been used to generate a p-value or coefficient of significance. A scan of the p-values of all the four predictors shows that the p-values are less than 0.05. This means that capital requirement (p-value of 0.046<0.05), Interest rate (p-value of 0.031<0.05), reserve requirement (p-value of 0.045<0.05) and Branch expansion (p-value of 0.044<0.05) are significant in explaining financial performance of Addis International Bank S.C. This is the key finding of this study.

In addition, Firm Size (p-value of 0.041 < 0.05), GDP (p-value of 0.031 < 0.05) and inflation rate (p-value of 0.012 < 0.05) significantly influence the performance of Addis International Bank S.C.

Table 5: Model Summary – Goodness of Fit

Indicator	Coefficient
R	0.81853
R Square	0.66999
Adjusted R Square	0.54232
Std. Error of the Estimate	0.29841

Source: compiled bank data, 2017

Table 5 shows the output for model fitness. The R coefficient of 0.8185 indicates that the predictors of the model, which are capital requirement, reserve requirement, branch expansion and interest rate, have a correlation of 81.85% with the dependent variable of return on assets (ROA). The R square also, called coefficient of determination is 0.669 and adjusted R square is 0.542 indicates that the model can explain 54.2% of the variations in the return on assets of the Addis International Bank S.C. (AdIB) and that there are other factors, which can explain 45.8% of the variations in return on assets (ROA). This shows that the independent variables (capital requirement, Reserve requirement, branch expansion and interest rate) of this study have high role to play on the performance of Addis International Bank S.C.

4.4. Data Interpretations

Regarding the descriptive statistics, it has been shown that the average of the dependent, independent and control variables over a period of five years (2012 -2016) of the Bank. The data had shown that return on assets of the Bank was 3.9 with a minimum of 2.2 and the a maximum of 4.6% respectively, that means the bank earned 3.9 cents of net income from a single birr of asset investment. In addition, the table below reveals that ROA distributed around the mean, the variation of ROA is low. The mean of capital requirement is 8.20701, reserve requirement's mean 0.01155, interest rate the mean 0.0453, branch expansion the mean 2.10000E.

The Pearson correlation coefficients between the variables revealed that Returns on assets had a positive correlation with the capital requirement, reserve requirement, branch expansion and interest rate. This indicates that Capital requirement, reserve requirement, branch expansion, interest rate and firm's size have an influence on the performance (return on assets) of the bank, which means that these variables are predictor of the performance of Addis International Bank S.C.

The adjusted R squared is equal to 0.542 that shows the explanatory variables of this study could make 54.2% of the performance (ROA) variance together; therefore 45.8% of performance variance of Addis International Bank under study in this research is affected by item and variations, which are not studied in this research. In terms of significance of each of the predictors, a t-test statistics has been used to generate a p-value or coefficient of significance. Then the result has shown that the explanatory variables of this study are significant in explaining performance (ROA) of Addis International Bank S.C.

The general objective of this study was to examine the role of National bank of Ethiopia regulation on the performance of Addis International Bank Share Company. One of the roles of bank regulation is to promote the integrity and reputation of financial services markets. It has the determinants in the study such as capital requirement, branch expansion, interest rate as well as reserve requirement. Financial Performance was measured by the Return on Assets of Addis International Bank S.C.

The first objective of this study was to examine the effect of capital increase requirement set by NBE on the Performance of Addis International Bank. The study finds a positive relationship between capital increase requirement and the performance of Addis

International Bank S.C measured by return on assets. Increase investment in NBE increase the performance of the bank by 2.2% and capital requirement (P- value of 0.046<0.05) shows that statistical significance at 5% level of confidence and the results reject the first hypothesis. This indicates that the bank will generate more profit by investing at NBE. The main reason behind this argument is that the bank would get more trust mainly from corporate customers. The findings correspond with the findings by Aysan and Ceyhan (2008) bank capitalization had a positive effect on the performance of banks. In addition, the findings are consistent with the findings by Altunbas et al., (2007) that capital can significantly influence bank cost and profit efficiency measures of banks.

The second objective of this study was to assess the effect of branch expansion on the Performance of Addis International Bank. The study finds a positive relationship between branch increase requirement and the performance of Addis International Bank S.C measured by return on assets. Increase in the number of branches increase the performance of the bank by 1.2% and branch expansion (P- value of 0.044<0.05) shows that statistical significance at 5% level of confidence and the result reject the second hypothesis and the results reject the first hypothesis. This indicates that the bank will generate more profit by extending its branch size. The findings contradict with the findings by Aysan and Ceyhan (2008) that the branch number had a negative effect on efficiency of the banks. This is main when related to the economy growth, when the economy is in rapid growth increasing the number of branch results in increased performance of the bank.

The third objective of this study was to examine the effect of interest rate setting on the performance of Addis International Bank. The study finds a positive relationship between interest rate and the performance of Addis International Bank S.C measured by return on assets. With the current interest rate the bank generate more revenue from interest and it increase the performance of the bank by 1.3% and interest rate (P- value of 0.031<0.05) shows that statistical significance at 5% level of confidence and the results reject the third hypothesis. This indicates that the bank will generate more profit by increasing interest rate. The findings are consistent with the findings by Demirguc et al. (2004) that positive and significant association between net interest margins and restrictions on activities.

The fourth objective of this study was to assess the effect of reserve requirement increase on the Performance of Addis International Bank. The study finds a positive relationship between reserve requirement and the performance of Addis International Bank S.C measured by return on assets. With the current interest rate the bank generate more revenue from interest and it increase the performance of the bank by 2.6 and reserve requirement (P- value of 0.045<0.05) shows that statistical significance at 5% level of confidence and the results reject the fourth hypothesis. This indicates that the bank will generate more profit by increasing its reserve at NBE.

CHPATER FIVE

CONCLUSION AND RECOMMENDATION

5.1. Conclusions

The objective of this study was to examine the role of National bank of Ethiopia regulations on the performance of Addis International Bank Share Company. The study had four specific objectives of establishing how capital requirement, branch expansion, interest rate as well as reserve requirement affect the performance of the Bank.

Regarding the findings of this study some few key conclusions can be given. On a general point of view it can be concluded that capital requirement, branch expansion, interest rate and reserve requirement explain the performance of Addis International Bank.

- The study concluded that capital requirement has positive and significant impact on the performance of AdIB measured by ROA. The higher capital requirements create a greater truth with mainly client of the bank, especially corporate client, which contribute for higher deposit share in the Bank's.
- In this study, reserve requirement has positive and significant impact on the performance of AdIB. This protects the Bank from unforeseen liquidity problems.
- In this study, interest rate and performance of the bank have positive and significant relationship. The bank generates more income from the current interest rate set by NBE.
- The study concluded that also from the current rapid economic growth expanding the number of branches would allow the bank to perform better. Branch expansion rate has positive and significant relationship with the performance of the bank.

5.2. Recommendations

In order to maintain banking sector stability, it is very important to minimize the activities, which restrict the performance of private commercial banks in Ethiopia. Therefore, based on the study results the following recommendations are forwarded.

- Regulation is a key pillar of financial institution operations in Ethiopia and by extension pillar to financial prosperity and stability. It is therefore important for the Government of Ethiopia to develop more policy and legal environment that is conducive to association of financial institutions.
- It is recommended that National banks should not extremely restrict because this can create information asymmetry and consequently it leads to the poor performance of the bank.
- The bank needs to exert its maximum effort to mobilize deposit and use aggressive branch opening strategy, in order to mobilize substantial amount of deposits and increase its market share and it is advisable to open many branches throughout the country
- NBE requires of bill purchase significantly affects the bank profitability, therefore it is better if policy makers minimize either the percentage of total loan required to purchase the bill or increase the interest rate paid for the bill.
- Further studies will therefore be of great use in explaining what really determines the financial performance of commercial banks especially in newly established banks.

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APPENDIX

Appendix 1: Secondary Data used for the study

	2011/12	2012/13	2013/14	2014/15	2015/16
EBIT	9,300,000.00	37,100,000.00	60,100,000.00	78,400,000.00	112,800,000.00
Legal Reserve	1,827,420.00	8,627,257.00	19,797,959.00	34,456,975.00	21,338,909.00
TA	424,700,000.00	916,200,000.00	1,300,000,000.00	1,700,000,000.00	2,500,000,000.00
NBE- Bill	40,229,491.00	102,632,733.00	179,906,681.00	320,352,593.00	455,538,670.00
IR	12,143,676.00	32,273,008.00	60,523,695.00	95,677,356.00	149,781,030.00
BE	5.00	11.00	18.00	31.00	40.00
Firm Size	8.628082261	8.961990287	9.113943352	9.230448921	9.397940009
GDP	10.1	8.5	9.7	10.2	10.5
IFL	25.6	8.9	7.5	8.4	9.6

DECLARATION

St. Mary's University, Addis Ababa	December 2017				
Name	Signature				
part or in full to any other higher learning ins	titution for earning any degree.				
work have acknowledged duly. I further con-	firm that this thesis work has not submitted in				
of	. All sources of materials used on this thesis				
I, the undersigned, declare that this thesis is r	undersigned, declare that this thesis is my original work, prepared under the guidance				

ENDORSEMENT

St. Mary's University, Addis Ababa	December	2017		
Advisor	Signature			
examination with my approval as the University	advisor.			
This thesis has been submitted to St. Mary's University, School of Graduate Studies for				