FACTORS AFFECTING PERFORMANCE OF COMMERCIAL BANKS IN TANZANIA.
A CASE OF COMMERCIAL BANKS IN DAR ES SALAAM.

By
David S. Lema

A research Proposal Submitted in Partial Fulfillment of the Requirement for the Degree of Masters of Business Administration in Corporate Management (MBA- CM) of Mzumbe University.

2019
CERTIFICATION

We, the undersigned, certify that, we have read and hereby recommend for acceptance by Mzumbe University, a dissertation/thesis entitled “Factors affecting performance of commercial banks in Tanzania: A Case of Commercial Banks in Dar es Salaam” in partial/fulfillment of the requirements for award of the degree of Master of Business Administration of Mzumbe University.

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Major Supervisor

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Date ____________________________

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Lastly I would like to thank all members of MUSO DCC cabinet, management of Mzumbe University and the entire community of Mzumbe University for their superb support to me as the President of MUSO DCC while preparing this work. I would like also to thank those who assisted me in one way or another and they have not mentioned in this work, let them know that, their contribution is much appreciated.
DEDICATION

To my late grandfather Mr. Eliashiwanga Lema.
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>BOT</td>
<td>Bank of Tanzania</td>
</tr>
<tr>
<td>CAR</td>
<td>Capital Adequacy Ratio</td>
</tr>
<tr>
<td>DCC</td>
<td>Dar es Salaam Campus College</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>LQD</td>
<td>Liquidity</td>
</tr>
<tr>
<td>MUSO</td>
<td>Mzumbe University Student Organization</td>
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<tr>
<td>ROA</td>
<td>Return on Asset</td>
</tr>
<tr>
<td>NBC</td>
<td>National Bank of Commerce</td>
</tr>
<tr>
<td>NPL</td>
<td>Non-Performing Loans</td>
</tr>
<tr>
<td>NMB</td>
<td>National Microfinance Bank</td>
</tr>
<tr>
<td>SAP</td>
<td>Structural Adjustment Program</td>
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<td>VAT</td>
<td>Value Added Tax</td>
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ABSTRACT

This study aimed at determining the factors affecting performance of commercial banks in Tanzania. The study analyzed the performance of commercial banks in Tanzania using linear multiple regression analysis for period of seven years from 2011 to 2017 using panel data of audited financial statements of selected fourteen commercial banks in Tanzania.

The study was undertaken by using published audited financial statements of fourteen (14) commercial banks for seven (7) years from 2011 to 2017. Published audited financial statements were taken from banks which have been operating in Tanzania at least for more than seven years. Various ratios related to both independent and dependent variables were computed and analyzed to determine to what extent these variables affect the performance of commercial banks in Tanzania.

The study found that, Capital adequacy, liquidity, non-performing loans and age are the major internal specific factors which affect the performance of commercial banks in Tanzania. In additions, the findings revealed that, liquidity had significant influence on the performance of commercial banks in Tanzania compared to other factors.

Commercial banks should establish favorable and innovative relationship with their borrowers by participating in their business meeting, social activities and delivering dedicated service with reasonable charges which will encourage them to transact more and settle their obligation rather than wait until they become defaulters which increase NPL. The central bank should ensure effective implementation of credit risk management policies and internal liquidity limits among commercial banks from initial point rather than waiting until commercial banks facing tight liquidity condition and huge deterioration of their capital. Precaution and implementation of policies should not wait adverse conditions which have been the case in banking industry in Tanzania.
# TABLE OF CONTENTS

CERTIFICATION ...................................................................................................................... i
DECLARATION AND COPYRIGHT ....................................................................................... ii
ACKNOWLEDGEMENTS ........................................................................................................ iii
DEDICATION ............................................................................................................................ iv
ABBREVIATIONS AND ACRONYMS .................................................................................... v
ABSTRACT ............................................................................................................................... vi
LIST OF TABLES ...................................................................................................................... xi
LIST OF FIGURES ................................................................................................................... xii

## CHAPTER ONE .................................................................................................................. 1
INTRODUCTION ....................................................................................................................... 1
1.1 Background of the problem ............................................................................................. 1
1.2 Determinants of Bank Performance. ............................................................................... 4
1.2.1 Capital size .................................................................................................................. 5
1.2.2 Deposit Mobilization ................................................................................................. 5
1.2.3 Asset quality .............................................................................................................. 5
1.2.4 Age ............................................................................................................................. 5
1.3 Statement of the Problem .............................................................................................. 6
1.4 Research questions ......................................................................................................... 7
1.5 Objective of the Study .................................................................................................... 7
1.6 Significance of the study ............................................................................................... 8
1.7 Limitation of the study .................................................................................................. 8
1.8 Organization of the study .............................................................................................. 9

## CHAPTER TWO ................................................................................................................ 10
LITERATURE REVIEW ......................................................................................................... 10
2.1 Introduction .................................................................................................................... 10
2.2 Key definitions and concepts ....................................................................................... 10
2.2.1 Performance Measurement ...................................................................................... 10
CHAPTER FOUR ................................................................. 41
PRESENTATION OF FINDINGS ........................................... 41
  4.1 Introduction .................................................................. 41
  4.2 Descriptive Statistics Summary of the Variables ................ 41
  4.3 Statistical Summary of the variables for various categories of banks. .... 41
  4.4 Relationship among the variables ........................................ 43
  4.5 Regression Results. .......................................................... 43
  4.6 Trend Analysis of Financial Performance of Commercial Banks .......... 44

CHAPTER FIVE ........................................................................ 48
DISCUSSION OF FINDINGS ................................................... 48
  5.1 Introduction .................................................................. 48
  5.2 Descriptive Analysis of Study Variables ................................. 48
    5.2.1 Descriptive Statistics of the Variables under Study ............... 48
    5.2.2 Analysis of Financial Performance of Commercial Banks ........ 51
      5.2.2.2 Liquidity Ratio ..................................................... 52
      5.2.2.3 Non-Performing Loan Ratio ...................................... 53
      5.2.2.4 Return on Assets (ROA). ......................................... 54
      5.2.2.5 Age .................................................................. 55
    5.3 Correlation Analysis between Dependent and Independent Variables .... 56
  5.4 Regression Analysis .......................................................... 56
5.4.1 Multicollinearity test ........................................................................................................ 57
5.4.2 Hausman test ..................................................................................................................... 58
5.4.3 Fixed Effect Regression Model ....................................................................................... 59

CHAPTER SIX .......................................................................................................................... 64
SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS .............................................. 64
6.1 Introduction ......................................................................................................................... 64
6.2 Summary ............................................................................................................................... 64
6.3 Policy Implications and Recommendations ...................................................................... 65
   6.3.1 Liquidity management policies .................................................................................... 65
   6.3.2 Credit Risk Management .............................................................................................. 66
   6.3.3 Favorable relationship with customers ......................................................................... 66
6.4 Limitations and Scope for further Studies. ....................................................................... 67
6.5 Conclusions ........................................................................................................................ 67
REFERENCE .............................................................................................................................. 69
APPENDICES ............................................................................................................................ 71
LIST OF TABLES

Table 2. 1: Classification of Non-Performing loans ............................................. 12
Table 2. 2: Distribution of Banking Institutions in Tanzania............................... 23
Table 2. 3: The expected impact of independent variables on ROA ...................... 33
Table 4. 1: Descriptive statistical results of Variables under Study ...................... 41
Table 4. 2: Descriptive statistic results for larger commercial banks ................. 42
Table 4. 3: Descriptive statistic results for middle commercial banks .................. 42
Table 4. 4: Descriptive statistic results for small commercial banks ..................... 43
Table 4. 5: Correlation between Dependent and Independent Variables ................. 43
Table 4. 6: Multiple Regression Analysis Results .............................................. 44
Table 5. 1: ROA of the selected Commercial Banks ............................................ 50
Table 5. 2: Categories of Commercial banks in Tanzania .................................. 51
Table 5. 3: Average NPL for selected Commercial Banks ..................................... 54
Table 5. 4: Number of years of Commercial banks ............................................ 56
Table 5. 5: Multicollinearity Results .............................................................. 58
Table 5. 6: Hausman test results ..................................................................... 58
Table 5. 7: Results of Fixed Effect Regression Model ........................................ 59
Table 5. 8: Relationship between ROA and NPL ............................................. 61
Table 5. 9: Summary of the findings .............................................................. 62
LIST OF FIGURES

Figure 2. 1: Conceptual framework ................................................................. 32
Figure 4. 1: Trend Analysis of Financial Performance of Large Commercial Banks. 45
Figure 4. 2: Trend Analysis of Financial Performance of Medium Commercial ....... 46
Figure 4. 3: Trend Analysis of Financial Performance of Small Commercial Banks. 47
CHAPTER ONE

INTRODUCTION

1.1 Background of the problem.

Performance refers to the execution or accomplishment of certain tasks, goals and objectives in an effective and efficient manner. Performance reflects the extent that, an individual or organization have achieved the intended or assigned goals/objectives in predetermined and organized standards. These intended goals define and widely cover what an organization is dealing with and provide a clear strategic direction of the organization based on key performance indicators (John Wiley & Sons 2009).

The stability and development of sound economy in the country depends on the performance of banking system. According to Ongore and Kusa (2013), adequate performance of commercial banks is very vital to the development of national economy of any country. A well performing banking system creates confidence to the shareholders, managers, customers and other stakeholders that, their fund are safe and this attracts more investments in the country.

Most of studies such as Chantapong (2005), Olweny and Shipho (2011) and Ongore and Kusa (2013) have shown that, most scholars started to express their interest on performance of commercial banks since Great Depreciation in 1940’s. The major reason was to determine the major determinants which affect financial performance of commercial banks and interrelation existed between performance of commercial banks and economic development of the country.

After the Second World War most developing countries were experiencing serious economic and financial crisis such as balance of payment difficulties, higher inflation, and unemployment. This led the World Bank to establish Structural Adjustment Programs in the late 1980’s to assist developing countries in microeconomic stabilization and Supply side reforms. The SAP initiated both microeconomic and institutional reforms to support economy by allowing market
liberation, removal of price controls, allowing market to determine efficient allocation of price, liberation of capital market through removal of barrier to foreign investments in developing countries. (Paloni and Alberto, 2006)

The SAP led to fiscal reforms, restricting and privatization of government enterprises and strengthening institutions that support economic stabilization such as banking institutions and independent central bank.

This Structural Adjustment Programs (SAP) in LDC in the late 1980’s led most of the financial institutions especially commercial banks to experience a major transformation in its operating environment. Most of firms in developed nations were doing well compared to those of developing nations. This led many firms including commercial banks from developed nation to extend their services globally by opening subsidiaries and branches into developing countries with the aim of earning higher returns and gaining global reputation and giving assurance to their shareholders and others stakeholders that they are able to compete globally (Ismi, 2004).

According to Claessens and Hore, (2012.) most of commercial banks from developed nations opened the door into various part of the world especially in African countries since 1980’s. This led to a significant increase in number of foreign owned commercial banks in African countries and affected the performance of domestic owned commercial banks. The increase in foreign owned commercial banks in developing countries has created a stiff competitions to domestic owned banks which has led to the decline in numbers of domestic owned banks in west of the African countries.

The global financial crisis of 2008 – 2010 had negative effect on the performance of commercial banks which led to most of development banks to be involved in extending credits to private firms which by then were not able to access fund from private commercial banks due to tight liquidity conditions and economic distress.
This condition led to the global debate on the role of the government on economy growth especially on financial sector (Martinez and Vicente 2012).

During global financial crisis most commercial banks faced tight liquidity condition to the extent that, the support from central banks were required to sustain their financial system. Despite the massive support from central banks many commercial banks failed, other were forced to merger or resolution. Commercial banks from USA and Europe lost approximately $1 trillion on toxic assets and from bad loans between 2007 and 2009 which resulted into tight liquidity, depreciation of the value of assets and absorption of capital of the banks. To combat liquidity risk and improve performance of commercial banks during global financial risk various initiatives were taken by Basel Committee on Banking Supervision (BCBS) which issued Principle for Sound Liquidity Risk Management and Supervision in September 2008 (Gideon et al, 2012).

The banking sectors in Sub-Saharan middle income countries have almost the same level of financial development with exception of South Africa which is doing much better than the rest of the countries. This is due to the fact that, most of banking sectors of these countries deal with huge population of low income earners and include higher concentration of foreign ownership. Most of commercial banks with foreign ownership are doing much better and enjoy high returns than the local banks due to matured financial system and advanced technology adopted by foreign banks (Chen 2009).

Despite the concentration of foreign banks, banking sector in Sub-Saharan low income countries are less efficiency compared to global competitors due high level of bureaucracy, corruption, low income earners and huge population of non-bankable people in these countries (Chen 2009).

Lending is the core business of commercial banks. They usually offer loans to their clients in return of both principal and interest. Commercial banks support the economic development in the country by channeling funds from surplus areas to deficiency areas. However economic downtown has led to the closure of many
businesses and most of clients not been able to pay back their loans. This has caused an increase in non-performing loans which affect the performance of commercial banks (Kaaya and Pastory).

According to Richard (2018) the emerging economies like Tanzania where capital market is not active lending is very potential for boosting economic development in the country. Most of the companies and firms have been claimed to be on tight credit policies used by commercial banks which are not friendly for them to borrow. On the same hand commercial banks have suffered due to huge loss which resulted from increase in non-performing loans which make them to initiate and implement tight credit policies to avoid going on distorting their performance.

The role of government on ensuring sound and stable financial system in the country is very important. The government policies, guidelines and taxation laws are key determinants of performance of commercial banks in the country. Tight policies and huge tax rate on financial services discourage financial services to consumers such as depositors and attracts sluggish economy in the country due to slow circulation of money in the system (Ally and Patel 2014). This study will particularly cover factors affecting performance of commercial banks in Tanzania.

1.2 Determinants of Bank Performance.
The performance of commercial banks is influenced by both internal and external factors. Internal factors are those which are within control of management of the bank such as capital size, liquidity management (deposit mobilization), asset quality, management efficiency and number of years a commercial bank have operated since it was found (age) while external factors are those macroeconomic variables which are beyond control of the bank such as inflation and GDP(Aburime, 2005).
1.2.1 Capital size
Capital size of a commercial bank is one of the internal factors which determine the strength and the ability of commercial bank to run its operations. The capital of the bank widens the business capacity of the bank to respond on various challenges that might face the bank such as operating losses. It also has a direct impact on liquidity and profit of the bank because it is the source of cheap deposit to the bank. The Capital size of the bank is measured through Capital Adequacy Ratio (CAR) (Sangmi and Nazir, 2010).

1.2.2 Deposit Mobilization
The ability of commercial bank to mobilize cheap deposits is very crucial for the performance of a commercial bank. Through deposits mobilization the bank can meet its obligations on time and transform those deposits into loans. Deposit mobilization improves the liquidity condition of the bank by ensuring that, adequate fund is available to settle immediate obligations when they arise. Liquidity condition can be measured by ratio of total customer deposits to loans (Ally and Patel, 214).

1.2.3 Asset quality
The quality of the assets owned by the commercial bank relies much on the extent to which it is exposed to credit risks. When borrowers are not honoring and meeting their obligation on time, this exposes the bank to high credit risk which may arise to non-performing loans which might hinder the performance of commercial bank. According to Olweny and Shipo (2011) poor asset quality and low level of liquidity are the major causes of bank failures. The asset quality of a commercial banks is measured by NPL loan ratio.

1.2.4 Age
This refers to the number of years a commercial bank has been in the market since it was granted a banking license. It is expected the bank’s age to influence its performance due to its experience in dealing with customers, bank’s products, employers, regulators and shareholders. However performance of a commercial bank can not only rely on the number of years it has been in the market however, other
market drivers such as technology, innovation and macro-economic variables must be considered (Cekrezi 2015).

1.3 Statement of the Problem

The bank of Tanzania (BOT) is a regulatory body responsible for monitoring and supervising financial institutions in the country for stable and sustainable growth of the national economy. The BOT have established strong policies, regulations, guidelines and acts such as Bank and Financial Institution Act 2006 for proper monitoring of financial institutions.

In January 2018 the Bank of Tanzania revoked banking license of five banks namely Covenant Bank For Women Limited, Efatha Bank Limited, Njombe Community Bank Limited, Meru community Bank Limited, Kagera Farmers Corporative Bank Limited and Efata banks for being undercapitalized. One of the major reasons for these banks to be undercapitalized was due to the increase in number of defaulters (non-performing loans) which made them experience tight liquidity condition and thus it became a challenge for them to meet maturity obligation of their customers.

In May 2018 the central bank approved the merger of Twiga Bancop Limited and TPB Bank PLC after Twiga Bankcop Limited became under statutory supervision since October 2016 due to undercapitalization. BO revoked and suspended the banking license of some banks with the aim of improving oversight and performance of both state own commercial banks and private banks.

According to Bank of Tanzania Annual report of 2016/17 most commercial banks in Tanzania have experienced tight liquidity condition in the market since the first half of 2016/2017 due to a number of the reasons such as decline in net budgetary inflows, sluggish economy, higher regulatory standards such as demand of more taxes by introduction of VAT charges for financial services and poor performance of private sectors which have led to an increase of non-performing loans (Bank of Tanzania Annual Report 2016/17).
The closure of five banks, merger of two commercial banks and suspended banking license of Bank M which was later taken by Azania Bank drives an interest for me to critically analyze the extent to which the internal factors are affecting the performance of commercial banks in Tanzania and thus come with recommendations and better mechanism which will improve the performance of commercial banks.

1.4 Research questions

1. How capital adequacy of the bank affect the performance of commercial banks in Tanzania?
2. To what extent may liquidity affect the performance of commercial banks?
3. To what extent non-performing loans affect performance of commercial banks in Tanzania?
4. To what extent the age of commercial bank affect the performance of commercial banks in Tanzania?

1.5 Objective of the Study

The main objective of this study is to determine the major factors affecting performance of commercial banks in Tanzania.

The specific objectives are;

1. To determine the effect of capital adequacy on the performance of commercial banks in Tanzania.
2. To assess the effect of liquidity on performance of commercial banks in Tanzania as stimulus of performance of commercial banks.
3. To investigate the extent to which nonperforming loans affect performance of commercial banks in Tanzania.
4. To establish the relationship between the age of bank and the performance of commercial banks in Tanzania.
1.6 **Significance of the study**

There is little information describing the performance of commercial banks in most of the developing countries due to low quality of bank information, low level of financial development, huge population of non-bankable people and high level of bureaucracy to access information. However most of middle income countries in Sub Saharan Africa have advanced financial system which enhance availability of data which can be used to investigate factors affecting performance of commercial banks (Chen 2009).

This study is filling the existing gap on few conducted researches and information regarding performance of commercial banks in most of developing countries. It is expected that, the research findings of this study will provide more knowledge which can guide most of decision makers such as BOT in formulations of policies and tax laws which can create conducive environment for commercial banks to operate.

Following deterioration of performance of most commercial banks and closure of some banks in Tanzania there is a need of this study to guide the government and other stakeholders through central bank on formulation of policies and laws which will provide precautionary and mitigation measures to prevent adversely performance of commercial banks which may lead to their collapse.

1.7 **Limitation of the study**

There are few and limited source of bank information in Tanzania and most of banks do not have tendency of publishing their information unless are demanded and bounded by regulatory requirements. Some of commercial banks maintain high level of confidentiality for competitive advantage in the market. However this challenge was overcame by requesting appointments with responsible officers and managers of various commercial banks, auditing firm and other regulatory bodies such as Bank of Tanzania in order to get annual audited financials of various commercial banks to ensure the reliability of the data of this study.
1.8 Organization of the study

This study have been organized into main six chapters. The first chapter covers the background, statement of the problem, research questions, objectives, significance of the study and limitation of the study. Chapter two of the study covers the review of the literature of the factors affecting performance of commercial banks. Chapter three covers the research methodology applied, while chapter four and five cover the presentation and discussion of findings respectively. The last chapter cover summary, conclusions and recommendations.
CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction
This chapter involves a critical review of the literatures relating to the factors affecting performance of commercial banks. It involves review of various theories and empirical studies from various sources which discuss and provide more insight about this study.

The main objective of this chapter is to absorb adequate understanding and knowledge from other scholars about the subject under study and identify the gap existing in order to develop a conceptual framework which guides the study.

The performance of commercial banks is affected by both internal factors and external factors. Internal factors are those factors which are within control of the bank such as capital, liquidity management, management quality and control of non-performing loans while external factors are factors which are beyond banks control such as micro economic variables which may influence the performance of commercial banks such as GDP and inflation. For the purpose of this study only internal factors have been elaborated.

2.2 Key definitions and concepts
The key words that guide this study are liquidity, non-performing loans, assets quality, management quality, earning, and capital adequacy which are described below.

2.2.1 Performance Measurement.
According to Richard et al, (2009), performance is the outcome measured against its input. It may include financial performance, product performance, and organizational performance.
Performance reflect the actual result of operational activities conducted by the organization. Performance measurement is used as an indicator of alerting an organization on its various activities in order to be in line with established standards. According to Dang (2011) the performance of commercial banks can be determined by both internal and external factors. The internal factors are those which are within the bank capacity such as Capital size, deposit mobilization, loan portfolio, bank size and ownership while external factors are those factors which are beyond the bank ability such as inflation and GDP.

2.2.2 Liquidity Management
Liquidity refers to the ability of being able to meet short term obligations when they fall due. The ability of commercial banks to ensure that, when customer’s deposits are demanded are available on time and an efficient manner stipulates that, the bank has good liquidity condition. Liquidity condition can be measured by the ratio of short term obligation to short term assets available. According to Basel III international regulatory framework for banks, the best liquidity ratio is 2:1 which also has been adopted by Bank of Tanzania to regulate liquidity conditions of commercial banks.

2.2.3 Non-performing loans (NPL)
Non-performing loans refers to loans which are past due over 90 days. This means that, the customers do not honor their obligation (interest and principal) when they fall due over 90 days (IMF 2009). Hennie and Sonja (2009) define non-performing loans as assets which do not generate any income. Non-performing loans determines the quality of assets of the bank. If the bank has low non performing rate it means that, the quality of banks assets are good and if there is larger rate the bank is advised to reduce non-performing loans to the acceptable level to avoid capital deterioration which may lead the bank to be undercapitalized.

The Bank of Tanzania has classified non-performing loans into three categories which are substandard, doubtful and loss as shown below
Table 2.1: Classification of Non-Performing loans

<table>
<thead>
<tr>
<th>Number of Pat Due Days</th>
<th>Classification</th>
</tr>
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<tbody>
<tr>
<td>91--------- 180</td>
<td>Substandard</td>
</tr>
<tr>
<td>181--------360</td>
<td>Doubtful</td>
</tr>
<tr>
<td>361 and above</td>
<td>Loss</td>
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2.2.3 Capital Adequacy.

Capital refers to the amount of fund contributed by the owner to support and ensure the business activities are conducted smoothly. The amount of capital contributed by owners may be inform of paid up shares which give them the authority of future returns and control of the company. Capital Adequacy refers to the minimum capital requirement that commercial banks are required to maintain for carrying on banking services as stipulated in Basel framework (Athanasoglou et al., 2005).

Maintaining the larger capital widens the capacity of the bank on engaging in banking activities more efficiently and effectively. It provides more liquidity capacity to the bank and expands its ability for lending. The bank of Tanzania has set fifteenth billion as the minimum capital requirement for a commercial bank to operate in the country.

2.2.4 Management Efficiency.

Management efficiency refers to the quality of operational activities which support the core business of the organization. The quality of staffs an organization is maintaining have influence on its performance to a larger extent. Management efficiency can be measured by the way operating cost are controlled and handled, operating profit to revenue generated and expenses to total assets (Ongore, 2016).
2.2.5 CAMEL ranking

CAMEL ranking is the international banking ranking system which most of regulatory body use to assess the quality of various factors on determining the performance of commercial banks. CAMEL stands for Capital adequacy, Assets quality, Management quality, Earning quality and Liquidity. Central banks assess these factors when they inspect commercial banks to detect if either of the factor have been violated and take precautionary measurement to safeguard the rights of the depositors.

CAMEL is a useful tool to examine the soundness and financial health of commercial banks in the country and act as a signal which alerts central banks to mitigate any possible risk which may lead to the failure of commercial bank. By using this tool it becomes easy to determine the factors affecting performance of commercial banks in Tanzania (Dang 2011).

2.3 Theoretical literature review.

This part involves critical review of various theories related to the study which provide more insight about the performance of commercial banks. Liquidity management theories and information asymmetry theory have been used to provide more information regarding factors affecting performance of commercial banks.

2.3.1 Liquidity Management theories.

Liquidity management involves two major forms which are ability to trade off an asset such as stock or bond at prevailing market price and ability to meet contractual obligation when they arise which is mostly used in financial institutions. (Alshatti 2015)

However for the bank to be able to handle their daily operations and providing dedicated services to their client it must be able to honor all contractual financial obligations such as lending, investing and withdraws on time (Amengor, 2010).

The following theories describe the relationship existing between liquidity condition and performance of the commercial banks.
2.3.1.1 Anticipated Income theory.

The Anticipated Income theory was developed in 1945 by H. V. Prochnow and advocates that, commercial banks can improve liquidity by providing long term loan which will be paid by periodically installments and assure the bank adequate liquidity during payments.

According to the theory, the bank when granting long term loan take into consideration that, the bank liquidity will improve and be strong upon repayments of the loans installments by the borrower. This is due to the fact that, commercial banks use monthly loans installment made by borrowers for reinvesting and meeting maturity obligations when they fall due. When commercial banks provide long term loan also plan on how expected earnings will be collected to avoid liquidity distress which might affect the normal banking operation activities. The bank do not only rely on the securities provided as collateral rather than the anticipated earning.

According to H .V. Prochnow(1945) commercial banks can use loan installments made by borrowers as a source of continuous liquidity rather than depend on idle cash which does not generate any income. The flow of interest and principal repayment can give a broad picture on how commercial banks can plan for future liquidity while generating income.

The theory addresses three major contributions to the performance of commercial banks which are liquidity, safety and profitability. By providing the long term loan with assurance of principal and interest installments periodically will enable the bank to settle short term contractual obligations and engage in potential investments. Also by considering the ability of the borrower on provision of loans it ensures that, the provided loan is safe and the probability of default tend to be low. The bank can use this two opportunity factors to improve its business operation and make profit.

However the theory do not depict the mechanism that commercial banks can use to access immediate cash during tight liquidity season rather than waiting till interest and principal installments from borrowers fall due or selling. The theory consider
long term loans as source of liquidity but practically long term loans such as mortgage have long term maturity and relying on them as source of liquidity will create liquidity crisis. Also the theory depicts that, such long term loans can be sold in the secondary market to cover the liquidity gap but the challenge is that there is no reliable market when liquidity need arise to sell long term loans.(Alshatti 2015)

2.3.1.2 Liability Management theory.

Liability Management theory was developed in 1960s and stipulates that, for better management of liquidity, commercial banks should not focus on normal old sources of liquidity such as dealing with liquidity assets and investments which are quickly convertible to cash and propose alternative means to ensure it complies with liquidity requirements. The theory propose alternative sources of liquidity which may improve performance of commercial banks such as to issue negotiable instruments (certificate of term deposits) to the public, interbank borrowing, borrowing from the central bank and raising capital fund through issue of share or plough back generated profit.(Ibe, 2013).

These alternatives sources of liquidity are very common especially to the developing countries where commercial banks do not have enough capital for running their operational activities and demand additional fund from the market to cover the existing gap. This theory centered more on liability side of the balance sheet as the source that can make commercial bank more liquid for improving running daily operational activities.

According to Nwankwo (1991) the theory argues that, there is no need for commercial banks for holding more liquid assets while it can buy all required fund from the market using alternative sources of liquidity. But practically commercial banks relies on both liquid assets and alternatives sources of liquidity such as borrowing money and capital market.
However the alternatives sources of liquidity such as issuing of certificate of deposits, interbank borrowing are subject to stiff competition in the market due to fluctuation of interest rate. This might force commercial banks to call for expensive deposits which affect the profit of the bank. If it happens these expensive deposit are not replaced by cheap deposit on maturity, banks find themselves on liquidity stress and this affect their performance(Ibe, 2013).

The theory depicts the importance of liquidity on performance of commercial banks but it ignores the role of holding liquid assets and self-liquidation of loans which are expected to provide immediate cash during the time of distress. It is the best practice for commercial banks to hold liquidity assets and also to use other alternative means as a sources of liquidity. The important issue is managers and those are the ones responsible for monitoring performance to ensure that, there is appropriate balance to avoid distortion of balance sheet(Ibe, 2013).

2.3.1.3 Commercial loan theory
This theory advocates that, performance of commercial banks much relies on the ability of having quick cash in circulation for running daily operation and cover maturity obligation on time. It stipulates that, commercial banks should engage in provision of only short term self-liquidating productive loans which both generate income and making the bank more liquid. Self-liquidating productive loans involves loans for finance production of goods, inventories, distribution of goods and storage. Commercial banks grant these loans with expectation that, the receipts from sale of goods and inventories will liquidate the loan automatically (Emmanuel, 1997).

To ensure adequate liquidity and proper supply of money in the economy the theory suggests that, the central bank should lend commercial banks based on securities such as treasury bills and bond when engaging in provision of short term self-liquidating productive loans. These loans stimulate trade activities and boost the national economy.
Albeit, this theory applies only when there is productive activities which increase supply in the economy. When there is shrink economy, depression, decline in production and trade activities and it becomes difficult for borrower to settle their outstanding. This will result to default loans and inability of commercial banks to settle their obligation which depends on installments expected from borrower and impair performance of commercial banks.

It is advised that, commercial banks should not rely only on self-liquidating productive loans as a source of liquidity due to the fact that, during downtown of the economy most of trade activities and business operation tend to decline and affect liquidity condition of commercial banks. Commercial banks should have adequate liquid assets which will keep the bank safe, liquid and more profitable.

2.3.1.4 Shift-ability theory
This theory was developed by H.G. Moulton in 1918 and suggests that, commercial banks should hold part of assets which can be easily shifted to other banks when the need of immediate cash (liquidity) arises. Commercial banks should hold assets like treasury bills and bill of exchange which can be easily traded in the secondary market to cover the liquidity gap that might arise. By doing so commercial banks become more efficient in their business operations. (Alshatti, 2015).

2.3.1.5 Information asymmetry theory
This theory suggests that, it is difficult to distinguish between what is good from bad for the two parties involved in a transaction which will need them to make a rational decision. This might result into adverse selection and moral hazards which can affect the performance of the organization. The theory advocates that, one part (borrower) may have more information and knowledge regarding the transaction than the other part (lender) and having more negotiation power that will force other part to enter into commitment without knowing whether that was right decision or not (Auronen, 2003).
The situation is that commercial banks have inadequate information in the market about their clients, their business operations and other credit related information. This leads to one party (borrower) to take advantage of the part with less information resulting into adverse selection and moral hazards which may lead to the accumulation of non-performing loans which shrink the performance of most commercial banks (Bester, 1994; Bofondi and Gobbi, 2003).

Lending is the core business for commercial banks and one of the major asset that commercial banks relies on. The asset quality (loan quality) of commercial banks is measured by the ratio of non-performing loans to Gross loans. Central banks have initiated various mechanism for controlling and monitoring performance of commercial banks especially in provision of loan. In Tanzania commercial banks are not allowed to accumulate non-performing loans more than 5 percent. In 2016 Commercial banks in Tanzania recorded NPLs of 10.27 percent compared to 7.88 percent in the previous year which were all beyond regulatory limit of 5 percent. The reason for huge NPLs was due to the shrinking of economic activities which led most of the borrowers not be able to repay their installments and most of commercial banks decreasing lending. (DBS Annual Report 2016)

2.4. Capital of the bank and performance of commercial banks

Capital adequacy is the one of the internal factor which reflect the ability of a commercial bank to run its operating activities and absorbing accumulated losses that may arise. The size of the capital of the bank reflects the ability to absorb credit risk, market risks and operational risks which commercial banks are exposed to. (Ongore & Kusa, 2013).

Okafor et al., (2010) conducted a research on relationship between capital adequacy and bank’s performance in Nigeria with a sample of 20 commercial banks (10 strong banks and 10 weak banks) selected from Nigeria Stock Exchange using regression model and found that, there is a positive relationship between capital and earnings.
However, the study revealed that, capital adequacy is not a significant determinant of performance of commercial banks in Nigeria compared to the liquidity.

The capital of the banks helps to reduce liquidity stress as the amount contributed by the owner assists to support the bank especially when deposits are expensive and the bank is operating under loss (Diamond, 2000). According to Sangmin and Nazir, (2010) the capital of the banks have direct impact on the profitability of the banks and secure the banks from being exposed to risks that might lead to the collapse and failure of commercial banks.

Most of the central banks have set minimum regulatory capital requirement to ensure that, the commercial banks have adequate capital which can assist them to survive and absorb any risk they may be exposed to. The Bank of Tanzania requires all commercial banks operating in the country to have a minimum capital of Tanzania Shilling 15 billion. Some of banking operating activities are limited to core capital maintained by the bank such as Single Borrower Limit which is limited to 25% of the core capital and foreign assets and liability exposures which is limited to 7.5% of the core capital (Banking and Financial Institutions Capital Adequacy Regulation, 2014).

2.5 Empirical review

There are very limited number of studies which specifically conducted on factors affecting performance of commercial banks. Most of the studies such as Alshatti (2015), Marozva (2015) Richard (2011) have tried to cover only single specific determinant and not as whole. This study reviews various determinants affecting performance of commercial banks in Tanzania.

Fredrick (2014) conducted study on performance of commercial banks and the main objective of the study was to determine the factors affecting performance of commercial banks in Uganda. The study involved the analysis of both domestic and foreign commercial banks licensed in Uganda. Linear multiple regression analysis method was used to analyze financial data of selected commercial banks for the period of 12 years from 2000 to 2011. The study found that, asset quality, capital
adequacy ratio, management efficiency, interest income and inflation were the major influencer of the performance of commercial banks in Uganda from 2000 - 2011. In addition to that the study found that, capital adequacy had significant negative impact on the performance of commercial banks in Uganda which implied that, huge capital with limited opportunities for investing cannot improve the performance of commercial banks. NPL had significant negative impact on the performance of commercial banks in Uganda during the period of the study due to high credit risk exposure. The study recommended that, both commercial banks and regulators should exercise efficient monitoring and control mechanism which will improve the quality of assets and protect commercial banks from being exposed to huge credit risk which deteriorate the performance of commercial banks. The study further recommended that, regulators should allow commercial banks to diversify their resources to other investments which can boost the performance of commercial banks.

Cekrezi (2015) conducted a study on the performance of commercial banks in Albania and defined the performance of commercial banks as the ability of bank’s management to ensure efficient and effective utilization of their resource in generating income. The study used ROA as a measure of performance and four independent variables which were capital adequacy, liquidity, size and age. The study examined performance of 16 commercial banks in Albania from 2010 to 2013 using multiple regression analysis and revealed that, commercial banks in Albania experienced huge loss from increasing rate of NPL due to failure of many business activities. Commercial banks were more liquid but not ready to invest their funds due to the fact that, most of clients were not able to pay back their obligations. Also the study found that, Capital adequacy and liquidity had negative and strong impact on the performance of commercial banks while bank size and age had positive but not significant impact on the performance of commercial banks in Albania. The study recommended that, commercial banks should establish a policy which will ensure effective management of capital and loans by ensuring optimal utilization of the resources.
2.5.1 Banking Sector in Tanzania

The government of Tanzania experienced a major economic reforms in 1986 which led the establishment of Economic Recovery Program (ERP) for recouping economic growth and maintaining price stability by improving the market policies, institutional reforms and macroeconomic management. The financial sector was very narrow and the government financial institutions monopolized almost all financial sectors. The National Bank of Commerce (NBC) was the largest financial institutions by then which had almost ninety percent of all assets in financial sector. The other financial institutions which were owned by the government include Corporate and Rural Development Bank (CRDB), Tanzania Investment Bank (TIB), People Bank of Zanzibar (PBZ) and Tanzania Housing Bank. After the first phase of this reforms which ended in early 1989 it was found that, financial sector in Tanzania was in difficult situation and major restructuring and changes was inevitable (African Development Fund Report, 2000).

After it was revealed that, the financial sector in Tanzania was facing difficult situation the government of Tanzania decided to form a Presidential Commission of Enquiry (PCE) in 1988 to review and analyze major challenges and weakness which the banking system was facing and develop bases and recommendations for financial sector reforms in 1990.

The government introduced regulatory reforms for managing and controlling financial institutions from 1991 with the aim of improving the efficiency of banking sector, widening banking competition and stimulating economic development in the country. (Ally and Patel 2004)

The government was required by the international financial institutions such as World Bank and Africa Development Bank (ADB) to implement prudent monetary and fiscal policies as stipulated in Framework paper for 1991/92 to 1993/94 which emphasized on putting credit restrictions to loss making organizations and parastatals to avoid being exposed to huge credit risk. It was by that time whereby the financial sector was strengthened by allowing private participation in financial sector and
establishment of proper regulations, guidelines, and circulars for monitoring and supervising commercial banks in the country (African Development Fund Report, 2000).

The financial sector reforms led the government to establish legal and regulatory framework by enacting new Banking and Financial Institutions Act of 1991 which financial institutions were required to adhered to. Also the government through Bank of Tanzania started to issues new circulars, guidelines and licensing regulations with the aim of monitoring and maintaining stability, safety and soundness financial system in the country. The Banking and financial Institution Act was reviewed in 1995 and 2006 to accommodate all changes which were done (BAFIA, 2006).

The establishment of Banking and Financial Institutions Act in 1991 allowed private ownership of commercial banks and widened the capacity of the central bank to manage and control commercial banks which increases the financial stability and the number of private owned banks in Tanzania. Some state owned commercial banks such as CRDB, TIB and PBZ which had larger non-performing loans faced major restructuring with the aim of restoring and widening their capacity of operating as financial institutions in the country(African Development Fund Report, 2000).

Introduction of tax on financial services increased additional costs to the services consumers get and discouraged most of the people from utilizing banking services. In Tanzania financial services were exempted from VAT but in 2016 this exemption were deleted and financial services and now subject to VAT as stipulated in Finance Act 2016. Increase of taxes in financial services is not health for sound and strong financial growth of the country as most of the people will deviate from using financial institutions and will be difficult to access cheap deposits which will result to cash shortage among commercial banks and liquidity distress.

Government control financial institutions and ensure that, they are operating efficiently and effectively through the central bank which have been invested with power of regulating monetary and fiscal policies for stable and sound economy. The
primarily objective of Bank of Tanzania is to define and formulate monetary policies which can be implemented for sustainable growth of national economy (BAFIA, 2006).

By close of the year 2017 the banking sector in Tanzania comprised of 58 financial institutions of which 37 were full-fledged commercial banks, 11 community banks, 3 financial institutions, 02 developed financial institutions and 05 deposit taking microfinance bank. Among all these banking institutions 7 are state owned and 51 are private owned financial institutions. Among all these banks 28 commercial banks are majority locally owned while 30 are majority foreign owned commercial banks (Directorate of Banking Supervision Annual Report 2017).

All these financial institutions are regulated by the Bank of Tanzania to ensure that they operate in a sound and health environment in order to enhance economic development in the country (Directorate of Banking Supervision Annual Report 2017).

Table 2. 2: Distribution of Banking Institutions in Tanzania

<table>
<thead>
<tr>
<th>Categories of Banking Institution</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Banks</td>
<td>32</td>
<td>34</td>
<td>34</td>
<td>36</td>
<td>38</td>
<td>37</td>
</tr>
<tr>
<td>Developed Financial Institutions</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Microfinance Banks</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Community Banks</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>12</td>
<td>11</td>
</tr>
<tr>
<td>Financial Institutions</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>49</td>
<td>52</td>
<td>53</td>
<td>57</td>
<td>59</td>
<td>58</td>
</tr>
</tbody>
</table>


From table 2.2 the number of commercial banks and community banks declined in 2017 due to the fact that, the central bank revoked license of FBME Bank Limited and Mbinga Community Bank Plc while one microfinance bank namely Yetu Microfinance Bank Plc was granted a banking license during the year.
According to FinScope Tanzania 2017 report, most of financial services in rural areas are provided by non-banking institutions such as mobile money agents which serve about 48.1% of the adult people compared to 5.9% adults who are served by commercial banks. This implies that, banking activities rendered by commercial banks in rural areas especially in developing countries have not spread in larger areas compared to urban areas. Seventy (78) percent of population in Tanzania living in rural areas are 5 km away from accessing financial services.

Mobile technology has become a catalyst for increase in banking activities in Tanzania where most of commercial banks have introduced mobile banking to enhance smooth and convenient environment for the users of financial services to transact. Mobile channel has become potential integral channel for unlocking potential opportunities for both financial services providers and users in accessing financial services in Tanzania(Masamila, 2014).

### 2.5.2 Government policies & taxation and performance of commercial banks

Banking services are subject to taxation depending on tax authorities. In some of the countries banking services are exempted while in other countries are not exempted. For example in European Union most of financial services are exempted from Value Added Tax (VAT)(Caminal 1997).

Grubert and Mackie (1999) conducted a study on taxation of financial services used by households and found that, financial services act as intermediaries good which channel fund from surplus to deficit and not something that provide utility in and off itself and most of funds in financial services is a result of final product which have already taxed and recommended that, financial services should be exempted from taxes.

According to Okigbo (2008), the monetary policies are formulated with the aim of controlling the supply of money in the country to ensure price stability, favorable balance of payment, efficient allocation of resources and stable economic activities which will create sound environment for stable financial system in the country.
Fiscal policies are formulated by the government to promote economic growth by controlling taxation and public expenditures. The government might apply either expansion fiscal policy or contractionary fiscal policy depending on economic situation and objective of the government during that time. The aim of these policies is to ensure that, the country achieve macro-economic goals and maintain stable financial system (Johnston, 2009).

2.5.3 Liquidity and performance of commercial banks

Marozva (2015) conducted a study on relationship between liquidity and bank performance of South African banks from 1998 to 2014 using regression model and observed that, financial institutions should realize that liquidity is vital and short run phenomena, thus commercial banks should put much efforts to boost their performance. Commercial banks normally maintain securities which can be easily converted into immediate cash when the need of fund arise to be able to meet short term obligations and running business operation activities as deemed. Liquidity is the one of the major determinants of performance of commercial banks, other being capital adequacy, credit risk, deposit growth, Gross Domestic Product and inflation (Marozva, 2015).

Musienga et al., (2017) conducted a research about the influence of liquidity risk on performance of commercial banks in Kenya using descriptive statistics and correlation analysis. Secondary data of 44 commercial banks from Kenya were used and found that, there is a positive and strong relationship between liquidity and the performance of commercial banks. This brings a signal that, liquidity is a potential factor for driving the performance of commercial banks.

Liquidity risk in commercial banks can be determined by the ratio of loans to deposits. For sustainable and sound liquidity commercial banks are required to raise deposits which will enable the bank to extend credits and at the same time being able to meet maturity obligations. The central bank of Tanzania has set the regulatory requirement on loan to deposits ratio to be not more than 80 percent and minimum liquid asset ratio of 20 percent. All commercial banks in Tanzania are required to
comply with these regulatory requirements to ensure that, depositor’s funds are safe (Banking and financial Institution, Liquidity Management Regulations, 2008).

When commercial banks holds more illiquid assets they expose themselves into liquidity risk especially during economic downtown seasons. Most of the commercial banks relies on the core deposits from their customers and use these deposits to reinvest and lend them to other clients for higher returns. During economic downtown season cheap deposits become very scarce and leading to commercial banks to access them at very expensive rate. This leads to imbalance between loans and available deposits which create financial gap. When there is financial gap commercial banks should have enough liquid assets which can be sold in the market to fill the existing gap and rescue the banks from being exposed to high liquidity risk. Tabarui, Ahmadi andEmami, (2013) examined the effect of liquidity risk on performance of 15 Iranian commercial banks in 2003 to 2010 and the findings showed that, both credit risks and liquidity risks are among the factors which lead to deterioration of performance of commercial banks.

Bourke (1989) conducted his studies on performance of 12 banks in European, North America and Australian countries using international data from 1972 - 1981 and observed that, there is a positive relationship between liquidity and performance of commercial banks in terms of profitability. Findings evidenced that, commercial banks with adequate liquid assets have higher returns compared to those with inadequate liquid assets. Chowdhury and Zaman (2018) conducted a study on effects of liquidity risk on Islamic banks performance from 2012 to 2016,by using regression analysis and found that, there is significant relationship between banks performance and liquidity indicators. The liquidity indicators used were such as loans to deposit ratio, liquid risk assets to total assets and capital to total assets.

Kosmidou (2008) in his study on determinants of performance of Greek banks during the period of EU financial integration 1990- 2002 and found that, banks which are less liquid have lower ROA compared to the banks which are more liquid. This implies that, performance of commercial banks are highly related to the liquidity.
This is due to the fact that, commercial banks cannot control external factors which affect their performance such as change in macro-economic activities in the country which might force commercial banks to sell their liquid assets to cover the shortfall.

Arif (2012) undertook the study on the impact of liquidity risk of 22 Pakistani banks from 2004-2009. The study used multiple regression and the findings from multiple regression showed that, liquidity risk impair performance of commercial banks in terms of profitability. The study further revealed that, if the bank can access cheap deposits it becomes easy to meet short term obligations rather than relying on central banks deposits such as Lombard, repos which are expensive to settle various obligations. Increasing in cheap deposits will enable the banks to meet its short term obligation on time and avoid additional cost resulting from expensive deposits and affect the performance of commercial banks. Therefore, the study recommended that, banks should have adequate deposits to boost their performance.

2.5.4 Relationship between non-performing loans and performance of commercial bank

The shrink of bank’s loan portfolio has been the center of episodes of costly banking system distress and economic crises in both developing and advanced economies such the United States of America (USA). Its devastating effects, as well its origination from a sharp increase of Mortgage loan defaults in the USA, underscore the linkages between financial and macro-economic shocks and have renewed interest in the relationship between Credit market frictions and the risk of financial stability. Nkuru (2011) conducted the study which examined the link between NPL and macroeconomic performance using panel regression and found that, increasing in NPL have negatively affected the macroeconomic development and is the result of shrinking of the economy in the country. The increase in NPL absorbs the ability of commercial banks to lend in various sectors which has adverse effects to the economy.
The economic development of a country and performance of commercial banks are invariably interrelated. This is due to the fact that, commercial banks act as intermediaries by channeling funds from surplus areas to deficit areas which boost macro-economic activities and support government policies. This leads to improved economy which enhances sound and sustainable financial system in the country. Shrinking of economic activities discourage investments and lead to huge accumulation of non-performing loans which impair performance of commercial banks in the country. Kenneth and Omwono (2015) conducted the study with the main objective of examining the relationship between NPL and financial performance of banking sector from 2008 to 2014, by using correlation research design which employed both content analysis and descriptive method in analysis of data and the findings revealed that, as NPL increased the performance of commercial banks were affected negatively. The study recommended that, credit officers should be trained well to acquire adequate skills and knowledge on monitoring loans to avoid increase in NPLs.

Most of the companies and firms in Tanzania have raised their concerns on lack of credits for running their business operations due to tight policies and procedures initiated by commercial banks in provision of loans. At the same time most of commercial banks have recorded huge non-performing loans which distress their performance Richard et al., (2008) examined the credit management system of commercial banks in Tanzania by using both primary and secondary data and found that, credit risk management system within commercial banks differs depending on the environment commercial banks are operating and is vital to enable commercial banks to track loans which might affect the performance before they are disbursed.

The performance of commercial banks in terms of performing loans is very crucial not only for sustainability and growth of commercial banks but for stability of the currency and sound economy in the country. This is because the increase in NPLs distort capital for commercial banks and lead to the inability for extending credits to various sectors. Lack of credits will lead to the failure and closure of all business relying on credits from commercial banks and create liquidity distress and affect
Richard (2011) conducted a study on factors causing NPL in commercial banks in Tanzania and the strategies to resolve them using semi-structured questioners which was administered to 48 bank officers from different commercial banks and observed that, the tendency of most clients to use loans borrowed for other purposes than that agreed in contract has led to the increase in NPL in most of the commercial banks and distort the capital position of commercial banks.

Various studies have been conducted in different countries regarding reasons for non-performing loans. Fernandez, Jorge and Saurina, (2000) examined credit growth, problem loan and credit risk provision in Spain by using a set of panel data from commercial banks and revealed that, despite the fact that most central banks are aware that banking crises were directly related to poor management of credit risk within financial institutions, it was a challenge for the central banks to force bank managers to follow more prudent credit policies during economic upturn. Nishimura, Kazuhiro and Yukiko (2001) conducted a study in Japan and found that, all loans availed during bubble era became NPLs when bubble burst.

According to Richard (2011) most of non-performing loans in LDCs are caused by deviation of loan from main purpose into non-productive activities by the borrower, moral hazard, adverse selection, insider transaction and poor risk management policies within financial institutions (Richard, 2011). These factors have led to the increase in NPLs among many commercial banks and have led to deterioration of the performance of commercial banks.

Waweru and Kalani (2009) conducted the study which investigated the major causes and remedies of commercial bank crises in Kenya using a sample of 30 Senior Managers of ten biggest commercial banks in Kenya and found that, economic downtown and poor debt collection policy were major causes of increase in non-performing loans. Most of the central banks have formulated prudent policies and asked commercial banks in their territories to formulate strategies which will reduce
NPLs and protect commercial banks from being adversely affected by the increase in NPLs.

2.5.5 Competition among commercial banks and performance of commercial banks.

Technological innovation has wide competitive pressure among commercial banks. The introduction of alternatives mean of serving customers such as having ATM, Master cards, credit cards, mobile banking, agency banking and others have simplified banking services rather than the customers reaching to the bank physically. Commercial banks are competing on serving their customers in innovative and competitive way to be able to grasp the market while generating income. In few decades ago all financial services were done at a branch level but currently numerous channels have been discovered and erode the branch dominance. (Harker and Zenios 2000). Since early 1990s substation reforms have been established to examine the impact of competition on banking efficiency (Ajisafe and Akinlo 2014).

Harker and Zenios(2000) revealed that, technological innovation in banking industry is the key element to consider in delivering strong and sound financial services in the country. Competitive threats are likely to emerge due to technological innovation adopted by competitors in the market which enable customers to access financial services more conveniently and the distance is no longer a barrier.

Vittas and Neal (1992) studied the trend of completion and efficiency in Hungarian banking and found that, competition among commercial banks stimulates development of private banks, strengthening regulatory and legal requirement and increasing variety of banking services which can be accessible to many customers.

Kennickeell and Kwast(1997) in their studies it was found that, the percentage of US households using alternative delivery channel for banking services was high and the performance of commercial banks which adopted technological changes and had alternatives means of serving customers was better than those commercial banks which relied on branch activities.
Simpasa (2011) conducted the study on competitive nature of Tanzania banking industry from 2004 to 2008 and revealed that, most of commercial banks in Tanzania generate income under condition of oligopolistic conduct. The study suggested that greater market competitiveness can increase and spread banking services and efficiency of banking system.

Data from Berger, Kashyap and Scalise (1995) revealed that, most of financial institutions have been transformed from pure intermediaries into retail providers due to stiff competition in banking industry. Transformation to retail servicing has led to competitive pressure among commercial banks in product mix and design, quality of the services, distributions channels and client mix. Competitions among commercial banks has resulted into quality services, accessibility of financial services and increase return to commercial banks.

2.6 Conceptual framework.

The conceptual frameworks outlay the approach and the bases of this research by showing the relationship existing among the variables. It show clearly the impact of independent variables on the dependent variables. The independent variables which are found to influence the outcome in this study are liquidity condition, non-performing loans (asset quality), age of commercial banks and capital adequacy. The study reveals clearly how these independent variables affect the dependent variable which is the performance of the commercial banks.

By using CAMEL ranking various ratios were computed to examine the relationship existing among the variables. The following are the ratios which were computed and critically analyzed to observe the relationship between variables. Under liquidity quick, liquidity to deposit ratio and current ratio were computed for selected banks and observed their impact on performance of commercial banks, the asset quality NPL ratio were used to access the relationship between asset quality and performance of commercial banks. Capital adequacy ratio was computed and examined the relationship existing between CAR and performance of the commercial banks.
From conceptual framework figure 2.1 various ratios were computed to depict the relationship existing between independent variables and Dependent variables by using regression model.

Cekrezi (2015) on his study on factor affecting performance of commercial banks in Albania by using regression analysis depicted the following results among the variables. The regression results showed that, capital adequacy has negative and significant impacts on profitability of the commercial banks in Albania. The capital adequacy ratio was calculated by ratio of total capital to total assets while profit was measured by ROA. This study depict the same results as Frederic (2014) in this variable. On the same study liquidity depicts negative and significant relationship on
profit while age depicts positive relationship with no significant on profitability of commercial banks in Albania.

Therefore, this study employed the same regression model used by Cekrezi (2015) and Fredric (2014) to determine the relationship existing between independent variables and dependent variable on the factors affecting performance of commercial banks in Tanzania.

Table 2.3: The expected impact of independent variables on ROA

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>RATIO</th>
<th>SYMBOL</th>
<th>FORMULA</th>
<th>EXPECTED RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Adequancy</td>
<td>Capital Adequancy Ratio</td>
<td>CAR</td>
<td>Shareholder Fund / Total Assets</td>
<td>Positive (+)</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Loan to Deposit Ratio</td>
<td>LDR</td>
<td>Loan / Deposit</td>
<td>Positive (+)</td>
</tr>
<tr>
<td>Non Performing Loans</td>
<td>Non performing loan ratio</td>
<td>NPL</td>
<td>Non performing loans / Gross Loans</td>
<td>Negative (-)</td>
</tr>
<tr>
<td>Age</td>
<td>Number of years</td>
<td>Years</td>
<td>Number of years since foundation</td>
<td>Positive (+)</td>
</tr>
</tbody>
</table>

Source: Researcher 2019

From table 2.3 it is expected that, the capital adequacy will move in the same direction as the Returns on Assets. This is due to the fact that, the increase of the capital keeps the banks sound and stable for its operations which create customer confidence and enable the bank to run its operation smoothly and produce more returns. According to Ongore and Kusa (2013) capital adequacy enable commercial banks to absorb credit, market and operational risk in which commercial banks are exposed.

It is was expected that, liquidity could also move in the same direction with return of assets. This is due to the fact that, the core business of commercial banks is lending and deposits are converted to loans for earning more returns. Increase in deposits will make commercial banks more liquid to the extent that they can be able to provide more loans.
Non-performing loans were expected to move in opposite direction with the return of assets. The increase in non-performing loans will affect the ability of commercial banks to issue more loans which could boost returns. In addition to that, the increase in non-performing loans will adversely affect liquidity condition of the commercial banks which at the end may affect the performance of the commercial banks.

From table 2.3 it was expected that, age will have positive direction as returns on assets. The researcher expects that, those commercial banks which have many years in the market will have better position of earning more returns compared to those commercial banks which have few years in the market. Therefore, it is expected that, as the number of years increase commercial banks are increasing their market share and technological innovation which will increase returns on assets. Cekrezi (2015) found that, the number of years ‘commercial banks have been in the market affect the performance of commercial banks positively because of more experience in dealing with customers, employees and working environment.

2.7 Hypothesis.

The objective of this study is to determine the factors affecting the performance of commercial banks in Tanzania. Based on this objective four research hypothesis are tested to determine to what extent these factors affect the performance of commercial banks in the country.

H1: There is no significant relationship between Capital adequacy and the performance of commercial banks.
H2: There is no significant relationship between liquidity and the performance of commercial banks.
H3: There is no significant relationship between non-performing loans and the performance of commercial banks.
H4: There is no significant relationship between non-performing loans and the performance of commercial banks.
CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction
This chapter describes the research strategies that have been adopted in this study. It describes the type of the study, study area, study population, unit of analysis, variables and their measurements, sample size and sampling techniques, types and sources of data, data collection methods, validity issues and data analysis methods.

3.2 Type of the study
Panel data analysis was conducted to help to study the behavior of the selected commercial banks over periods of time. Panel Data analysis is the method of studying multidimensional data over specified period of time. It involves studying of behavior of various objects such as firms, individuals and entities over periods of time or at specified point of time. Panel data analysis involves two main methods of analysis which are time series analysis and cross-sectional data analysis. Time series analysis involves study behavior of various phenomena or objects over periods of time while cross-sectional studies behavior of objects at a specified point of time (Baltagi, 2005).

The advantage of using Panel data analysis compared to other methods is that it gives more informative data which are more variable and less co-linearity among the variables. It becomes easy to control variables that cannot be controlled or measured such as cultural factors or business practices across companies or variables that can change over period of time and it allows to use variables at different level of analysis suitable for multilevel of hierarchical modeling. (Baltagi, 2005).

However, Panel data using short time series information normally use annual data which cover short span of time which do not include all activities which can provide the full picture of the organization or firm, this may result into attrition of data.
There are various types of panel data analytical model but for this study, the fixed effect model and random model were used to analyze annual financial data of selected commercial banks. Fixed effect model is used to analyze the variables which are different over period of time by showing the relationship between predictor and outcome within an entity or organization. Fixed model assist to control bias among the variables and ensure variables are not correlated to the extent that they can distort the accuracy and reliability of information. If the error terms in the variable are correlated then fixed model cannot be used because inferences may not be correct, then other models such as random model may be adopted. Random model assumes that variations across the entity are assumed to be random and are not related with the predictor or independent variable included in the model. For this study data were tested and fixed by the effect model.

3.3 Study area
The study was conducted in the city of Dar es Salaam because the headquarter of all commercial banks are located at Dar es Salaam.

3.4 Study population
The study population was all 37 licensed commercial banks in Dar es Salaam.

3.5 Units of analysis
The unit of analysis in this study was all the licensed commercial banks in Dar es Salaam. All the licensed commercial banks in Dar es Salaam were the target population of this study.

3.6 Variables and their measurements
The study include dependent variable and independent variables.

Dependent Variable
The dependent variable was the performance of the selected commercial banks measured by Return on Asset (ROA).
Independent variables

The independent variables were capital adequacy, liquidity, nonperforming loans and age of the bank.

Table 3.1: Study variables and their measurements

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>Total income to its total assets</td>
</tr>
<tr>
<td>Capital adequacy</td>
<td>Total capital to total assets</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Total loans to total customer deposit</td>
</tr>
<tr>
<td>Nonperforming loans</td>
<td>Total non-performing loans to Gross Loans</td>
</tr>
<tr>
<td>Age of the bank</td>
<td>Number of years of the bank</td>
</tr>
</tbody>
</table>

Source: Researcher 2019

3.7 Sample size and sampling techniques

Sampling is a method of selecting units from a population so that the decision about the population can be made. Fourteen commercial banks in United Republic of Tanzania were used as a sample. The ideal sample is large enough to serve as an adequate representation of the population about which the researcher wishes to generalize and small enough to be selected economically (Wambugu et al., 2015). According to Mugenda (2009) a sample size of between 10 and 30% is a good representation of the target population and hence 30% of all commercial banks will be adequate for analysis.

Sample size, \( n = 0.3 \times N \)

Where \( N \) is the total number of commercial banks in the United Republic of Tanzania and \( n \) is a sample size.

Tanzania have had 37 commercial banks as of December 2017. Therefore, \( N = 37 \). A per calculation number of sample size, \( n = 0.3 \times 37 = 11 \). This means that, a sample size of at least 11 commercial banks is appropriate and 14 commercial banks were selected as a sample.
3.8 Types and sources of data
Panel data from fourteen (14) commercial banks in the United Republic of Tanzania from 2011 to 2017 were used. This study used secondary data from the published audited financial statements of fourteen commercial banks in the United Republic of Tanzania.

3.9 Data Collection methods
Data were collected from published audited annual reports of the selected fourteen commercial banks in the United Republic of Tanzania from 2011 to 2017.

3.10 Validity Issues
Since the source of the data for this study were published audited annual reports of the sampled commercial banks in the United Republic of Tanzania from 2011 to 2017, then the source provided higher quality data which ensured validity issues for this study.

3.11 Data Analysis methods
STATA package were used to analyze the data. Descriptive analysis and inferential analysis were performed. The dependent variable was the performance of the selected fourteen commercial banks measured by Return on Asset (ROA) and the independent variables were capital adequacy, liquidity, nonperforming loans and age of the bank.

3.11.1 Descriptive analysis
In descriptive analysis, descriptive statistics such as mean, standard deviation, minimum and maximum of study variables (Return on Asset ((ROA), capital adequacy, liquidity, nonperforming loans and age of the bank) were produced to study characteristics of the variables.
3.11.2 Inferential analysis

3.11.2.1 Multiple Linear Regression

Since this study involved a multi-variable problem that is, when more than one independent variable is studied, multiple regression analysis was used. Multiple regressions represent an improvement over simple regressions, since it allows any number of explanatory variables to be included in the analysis (Albright et al., 2006).

For this study multiple linear regression Model was used to analyze the effects of independent variables (capital adequacy, liquidity, nonperforming loans and age of the bank) to dependent variable (Return on Asset (ROA)).

This study used Return on Asset (ROA) as the dependent variable, similar to studies of; Kusa (2013), Frederick(2014), Cekrezi(2015) among others.

3.11.2.2 Fixed –Effects Model

The fixed effect model explores the relationship between independent variables and dependent variable within an entity (Commercial Bank). Each entity has its own individual characteristics such as management efficiency, quality control, organizational objectives and operational control.

The advantage of using Fixed –Effects Model for this study is to control characteristics within the entity that may impact or bias the outcome/response variable. The fixed-effects model was also used to analyse the effect of independent variables varies over time

\[ Y_{it} = \beta_0 + \beta_1 x_{1it} + \beta_2 x_{2it} + \beta_3 x_{3it} + \beta_4 x_{4it} + \alpha_2 E_2 + \alpha_3 E_3 + \alpha_4 E_4 + \epsilon_{it} \]

\( Y_{it} \) = ROA is the dependent variable (DV) where \( i \)=commercial bank and \( t \)=time

\( \beta_0 \) = Constant term of the regression model,

\( \beta_j \) = \( j^{th} \) coefficient of the variable \( x_j \)

\( x_1 \) = Capital adequacy

\( x_2 \) = Liquidity

\( x_3 \) = Nonperforming loans
\[ x_i = \text{Age of the bank} \]

\[ \varepsilon_i = \text{Error term} \]

En is the commercial bank and

\[ \alpha_n = \text{Coefficient for the dummies commercial banks} \]

The coefficient of determination (R^2) was used to test the goodness of fit of the regression model or to determine explained and unexplained variation of the dependent variable.

### 3.11.2.3 Model Assumptions

Model assumption tested multicollinearity to determine the extent to which variables were correlated and their impact on this study. Variance Inflation factor (VIF) was used to determine the existence of multicollinearity among the variables. Data were tested and VIF of the variables were below 10 which implies that there was no multicollinearity. The results are depicted on Table 5.5.
CHAPTER FOUR
PRESENTATION OF FINDINGS

4.1 Introduction
This chapter presents various findings obtained after analyzing the published audited financial statements of selected fourteen commercial banks in Tanzania for seven years from 2011 to 2017. Tables and graphs have been used to present the findings regarding the performance of commercial banks in Tanzania and are discussed in chapter five.

4.2 Descriptive Statistics Summary of the Variables
Various ratios for both independent variables and dependent variable were computed for all selected commercial banks for the period under review. These ratios were analyzed using panel data and descriptive statistics results which are summarized in Table 4.1, shows the number of observations, mean, standard deviation and minimum and maximum value of each variable. Liquidity ratio had huge and significant mean of 130 percent compared to other variables while ROA depicted low mean of negative 0.4 percent.

Table 4.1: Descriptive statistical results of Variables under Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Observation</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>98</td>
<td>16.5%</td>
<td>13.2%</td>
<td>-0.03%</td>
<td>94.5%</td>
</tr>
<tr>
<td>LQD</td>
<td>98</td>
<td>130.0%</td>
<td>46.6%</td>
<td>15.4%</td>
<td>370.0%</td>
</tr>
<tr>
<td>NPL</td>
<td>98</td>
<td>7.2%</td>
<td>8.9%</td>
<td>0.0%</td>
<td>53.3%</td>
</tr>
<tr>
<td>AGE</td>
<td>98</td>
<td>25.50</td>
<td>27.14</td>
<td>2.00</td>
<td>93.00</td>
</tr>
<tr>
<td>ROA</td>
<td>98</td>
<td>-0.4%</td>
<td>4.7%</td>
<td>-22.5%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

Sources: Extract from STATA 2013

4.3 Statistical Summary of the variables for various categories of banks.
Commercial banks were categorized into three major categories which are larger commercial banks, middle commercial banks and small commercial banks. The ratios for all variables were computed and analyzed for each category of commercial
banks and descriptive statistic summary of the results are presented in Table 4.2, 4.3 and 4.4. Results from Table 4.2. 4.3 and 4.4 shows that, all categories of commercial banks had larger mean of liquidity ratio of 147% percent, 132 percent and 103% for larger, middle and small commercial banks respectively compared to other variables. In addition to that ROA for small commercial banks was negative while for larger and middle commercial banks was positive.

Table 4. 2: Descriptive statistic results for larger commercial banks

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>28</td>
<td>12%</td>
<td>2%</td>
<td>7%</td>
<td>18%</td>
</tr>
<tr>
<td>LQD</td>
<td>28</td>
<td>147%</td>
<td>17%</td>
<td>121%</td>
<td>193%</td>
</tr>
<tr>
<td>NPL</td>
<td>28</td>
<td>7%</td>
<td>4%</td>
<td>2%</td>
<td>14%</td>
</tr>
<tr>
<td>AGE</td>
<td>28</td>
<td>37</td>
<td>31</td>
<td>15</td>
<td>93</td>
</tr>
<tr>
<td>ROA</td>
<td>28</td>
<td>2%</td>
<td>2%</td>
<td>-2%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Sources: Extract from STATA 2013

Table 4. 3: Descriptive statistic results for middle commercial banks

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>49</td>
<td>13%</td>
<td>3%</td>
<td>8%</td>
<td>21%</td>
</tr>
<tr>
<td>LQD</td>
<td>49</td>
<td>132%</td>
<td>47%</td>
<td>77%</td>
<td>370%</td>
</tr>
<tr>
<td>NPL</td>
<td>49</td>
<td>9%</td>
<td>12%</td>
<td>0%</td>
<td>53%</td>
</tr>
<tr>
<td>AGE</td>
<td>49</td>
<td>28</td>
<td>26</td>
<td>5</td>
<td>93</td>
</tr>
<tr>
<td>ROA</td>
<td>49</td>
<td>1%</td>
<td>2%</td>
<td>-12%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Sources: Extract from STATA 2013
Table 4.4: Descriptive statistic results for small commercial banks

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>21</td>
<td>30%</td>
<td>24%</td>
<td>0%</td>
<td>94%</td>
</tr>
<tr>
<td>LQD</td>
<td>21</td>
<td>103%</td>
<td>59%</td>
<td>15%</td>
<td>191%</td>
</tr>
<tr>
<td>NPL</td>
<td>21</td>
<td>4%</td>
<td>5%</td>
<td>0%</td>
<td>15%</td>
</tr>
<tr>
<td>AGE</td>
<td>21</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>ROA</td>
<td>21</td>
<td>-6%</td>
<td>7%</td>
<td>-22%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Sources: Extract from STATA 2013

4.4 Relationship among the variables

The relationship among the variables were tested to determine the extent to which independent variables (CAR, LQD, NPL and Ages) are correlated with dependent variable (ROA). Results obtained are presented in Table 4.5 for more analysis.

Table 4.5: Correlation between Dependent and Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>ROA</th>
<th>CAR</th>
<th>LQD</th>
<th>NPL</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAR</td>
<td>0.5423</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LQD</td>
<td>-0.3471</td>
<td>-0.373</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPL</td>
<td>0.0598</td>
<td>-0.0748</td>
<td>-0.0224</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-0.2348</td>
<td>-0.2626</td>
<td>0.0957</td>
<td>0.0897</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: Extract from STATA work 2013

4.5 Regression Results.

Multiple regression analysis was done for all independent variables and results are summarized in the Table 4.6. Results depicted that, CAR and NPL had positive relationship with ROA while LQD and Age had negative relationship with ROA. These results are discussed in details in chapter five.
Table 4. 6: Multiple Regression Analysis Results

<table>
<thead>
<tr>
<th>ROA</th>
<th>Coef</th>
<th>Std. Err</th>
<th>T</th>
<th>P&gt;T</th>
<th>[95% conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>0.05913</td>
<td>0.038785</td>
<td>1.52</td>
<td>0.131</td>
<td>-0.0180541 0.1363135</td>
</tr>
<tr>
<td>LQD</td>
<td>-0.23606</td>
<td>0.007745</td>
<td>-3.05</td>
<td>0.003</td>
<td>-0.0390182 -0.0081933</td>
</tr>
<tr>
<td>NPL</td>
<td>0.071786</td>
<td>0.036947</td>
<td>1.94</td>
<td>0.056</td>
<td>-0.0017406 0.1453125</td>
</tr>
<tr>
<td>AGE</td>
<td>-0.00019</td>
<td>0.001306</td>
<td>-0.14</td>
<td>0.885</td>
<td>-0.0027882 0.0024104</td>
</tr>
<tr>
<td>CONS</td>
<td>0.01695</td>
<td>0.038242</td>
<td>0.44</td>
<td>0.659</td>
<td>-0.0591535 0.0930528</td>
</tr>
</tbody>
</table>

Source: Extract from STATA work 2013

4.6 Trend Analysis of Financial Performance of Commercial Banks

The performance of commercial banks is expressed by ROA. The trend analysis of performance of selected fourteen commercial banks for seven years from 2011 to 2017 was analyzed and depicted in Figure 4.1, 4.2 and 4.3. From both figures ROA was not stable during the period under review. As shown in Figure 4.1 ROA depicted huge decline from 2015 to 2017. This also was depicted for middle and small commercial banks as shown in Figure 4.2 and 4.3.
Figure 4.1: Trend Analysis of Financial Performance of Large Commercial Banks

Source: Extract from STATA data

Key
Bank 1 = Barclays Bank
Bank 2 = City Bank
Bank 3 = CRDB Bank
Bank 4 = NMB
Figure 4. 2: Trend Analysis of Financial Performance of Medium Commercial Banks

Source: Extract from STATA data

Key
Bank 1 = Stanbic Bank
Bank 2 = Akiba Commercial Bank
Bank 3 = Azania Bank
Bank 4 = Bank ABC
Bank 5 = Bank of Africa
Bank 6 = KCB Bank
Bank 7 = TPB Bank.
Figure 4.3: Trend Analysis of Financial Performance of Small Commercial Banks

Source: Extract from STATA data

Key:
Bank 1 = United Bank for Africa (UBA)
Bank 2 = Letshego Bank
Bank 3 = Mkombozi Bank
CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction
This chapter discusses both descriptive and inferential findings from the study. In descriptive analysis tables and graphs were produced to described the characteristics of both independent and dependent variables (ROA, CAR, NPL, LQD and AGE) used in the study. Multicollinearity among the variables was tested and found that, variables were not correlated to the extent that they can distort the accuracy of the model and data used. Fixed effect regression model was used to study the effect of the independent variables (CAR, NPL, LQD and AGE) on the dependent variable (ROA). Annual audited financial statements of the selected commercial banks from 2011 to 2017 were used and all ratios were derived from audited financial statements of selected commercial banks.

5.2 Descriptive Analysis of Study Variables
Variables were analyzed and descriptive statistics summary of the results was generated to show the relationship among the variables and their impacts.

5.2.1 Descriptive Statistics of the Variables under Study
Statistics summary of both independent variables and dependent variable used in this studies are provided in Table 4.1. The dependent variable used to measure the performance of the commercial banks below is Return on Assets (ROA) while the independent variables used are Capital adequacy, Liquidity, Non-Performing loans and number of years commercial banks have been operating since they were found F in United Republic of Tanzania (age).

Table 4.1 reports statistical summary for the variables used in the study. It shows that, the average Return on Assets (ROA) for the sample as a whole is -0.4%, the average of AGE is 25.5 years, the average of Capital Adequacy Ratio (CAR) is 16.5%, the average of liquidity ratio is 130% and average of NPL is 7.2%.
The average Capital Adequacy ratio of the selected commercial banks is 16.5% as shown in the table 4.1 which depicted, that most of the commercial banks complied with the minimum core capital regulatory limit of 12.5% and total capital of 14.5% (Bank and Financial Institution Regulation for Capital Adequacy 2014). However data from Table 4.1 shows that, CAR deviates from the maximum of 94.5% to a minimum of -0.03% due to the fact that three commercial banks among selected commercial banks were undercapitalized between 2011 to 2014 and there were minimum deviation of shareholder fund and total assets during this period which led to high deviation between maximum and minimum values.

From the study, the average liquidity ratio of the selected commercial banks was 130% as depicted in the Table 4.1. This revealed that, under the period of study most of commercial banks had tight liquidity condition to the extent that they were not complying with maximum regulatory limit of maintaining deposit to total loans ratio of 80%. From the Table 4.1 liquidity ratio range from the maximum of 370% to the minimum of 15.4%. This implies that, there were critical liquidity condition for the commercial banks which impair the performance of selected commercial banks.

The average non-performing loan ratio (NPL) as shown in the table 4.1 was 7.2% which was above the industry’s benchmark of 5 percent which implies the decline in the asset quality of most commercial banks. This might be a result of liquidity distress in the sector which made borrowers unable to honor their obligations and economic downturns. NPL ranges from 0% to 53.3%. This implies that very few commercial banks were able to comply with maximum regulatory limit of 5% while many commercial banks had non-performing loans above regulatory limit. Increase in non-performing loans among commercial banks deteriorate the performance of most commercial banks through recognition of bad debt and impairment loss on loans and advances which absorb huge returns on those assets.

From the table 4.1 age represent number of years commercial banks have been in the market since they were founded in United Republic of Tanzania from the analyzed period. The results show that the average number of years which selected
commercial banks have been in the market since they were founded in United Republic of Tanzania is 25.5 years. The number of years commercial banks have been operating in the market enable commercial banks to understand their customers, products to offer, managing interrelationship among employees and shareholders and the way to create strong competitive environments. Both of these factors have strong impacts on the performance of commercial banks. Data collected from selected commercial banks revealed that, commercial banks with many years in the market have better performance than those with few years in the market.

Results from Table 4.1 shows that, the average return on assets was -0.4% among all 98 observations made. ROA ranges from the maximum of 4.1% to the minimum of -22.5%. Generally the best ROA is the one which is at least 5%. From the results on Table 4.1 all commercial banks have ROA below 5% which implies that, the general performance of all commercial banks under the period of review was not good.

Table 5.1: ROA of the selected Commercial Banks

<table>
<thead>
<tr>
<th>Year</th>
<th>Barclays</th>
<th>Citibank</th>
<th>CRDB</th>
<th>NMB</th>
<th>Stanbic</th>
<th>Akiba</th>
<th>Azania</th>
<th>BankABC</th>
<th>BOA</th>
<th>KCB</th>
<th>UBA</th>
<th>TPB</th>
<th>Letshego</th>
<th>Mkombozi</th>
<th>Averg p.a</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
<td>2%</td>
<td>-4%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>-5%</td>
<td>3%</td>
<td>-2%</td>
</tr>
<tr>
<td>2016</td>
<td>-1%</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
<td>-1%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>-11%</td>
<td>3%</td>
<td>-6%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>2015</td>
<td>-1%</td>
<td>3%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>2%</td>
<td>-1%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>-2%</td>
<td>2%</td>
<td>-20%</td>
<td>1%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>2014</td>
<td>0%</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>-12%</td>
<td>1%</td>
<td>1%</td>
<td>-3%</td>
<td>2%</td>
<td>-22%</td>
<td>2%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>2013</td>
<td>0%</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
<td>-2%</td>
<td>1%</td>
<td>0%</td>
<td>-2%</td>
<td>1%</td>
<td>1%</td>
<td>-2%</td>
<td>2%</td>
<td>-13%</td>
<td>0%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>2012</td>
<td>-1%</td>
<td>2%</td>
<td>3%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>-3%</td>
<td>1%</td>
<td>1%</td>
<td>-6%</td>
<td>2%</td>
<td>-17%</td>
<td>-2%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>2011</td>
<td>0%</td>
<td>3%</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>-6%</td>
<td>2%</td>
<td>-8%</td>
<td>0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total Averg</td>
<td>-0.2%</td>
<td>2.7%</td>
<td>1.8%</td>
<td>3.3%</td>
<td>1.2%</td>
<td>1.2%</td>
<td>0.1%</td>
<td>-2.4%</td>
<td>0.7%</td>
<td>0.9%</td>
<td>-4.6%</td>
<td>2.4%</td>
<td>-12.6%</td>
<td>0.4%</td>
<td>-0.4%</td>
</tr>
</tbody>
</table>

Key

- **Larger Commercial Banks**
- **Middle Commercial Banks**
- **Small Commercial Banks**

**Source:** Extract from audited published financial statements

From Table 5.1 the average return on assets was -0.4% as depicted in Table 4.1 with general results. NMB bank have higher ROA of 3.3% compared to all selected commercial banks while Lets ego have lower and negative ROA of -12.6%. Results on Table 5.1 indicates that, larger commercial banks had positive average ROA with
exception of only one commercial bank which had ROA of -0.2%. The same happened to middle commercial banks, among 7 middle commercial banks selected only one commercial banks had negative ROA of -2.4%. For small commercial banks only one commercial bank had positive ROA while the remaining had negative ROA.

Data from Table 5.1 implies that, the performance of small banks were not good compared to middle and larger commercial banks. The negative average of ROA of -0.4% was much contributed by huge deviation of ROA of small commercial banks compared to larger and middle commercial banks. Two small commercial banks namely UBA and Let she go had huge negative ROA of -4.6% and 12.6% respectively which impact the total average ROA.

### 5.2.2 Analysis of Financial Performance of Commercial Banks

This section presents the analysis of the financial performance of commercial banks in Tanzania from 2011 to 2017 using a sample of 14 commercial banks. Commercial banks have been categorized into three main groups which are larger commercial banks, middle commercial banks and small commercial banks based on total assets as illustrated in Table 5.2.

#### Table 5.2: Categories of Commercial banks in Tanzania

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Asset Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Larger Commercial Banks</td>
<td>Above TZS 700 Million</td>
</tr>
<tr>
<td>Middle Commercial Banks</td>
<td>Within TZS 151 million and TZS 699million</td>
</tr>
<tr>
<td>Small Commercial Banks</td>
<td>Below TZS 150 Million</td>
</tr>
</tbody>
</table>

**Source: Researcher 2019**

From a sample of 14 commercial banks selected, four commercial banks were categorized under larger commercial banks (Barclays, CRDB, NMB and Stanbic), seven commercial banks were categories under middle commercial banks (City, Akiba, Azania, Bank ABC, BOA, KCB and TPB) while three commercial banks
were categorized as small commercial banks (UBA, Lets ego and Mkombozi). Table 5.2 stipulate clearly the category of each selected commercial banks. The summary for descriptive statistical results of all categories of commercial banks are presented in Table 4.2, 4.3 and 4.4 which depicted the results of both independent variables and dependent variable.

5.2.2.1 Capital Adequacy Ratio
The Capital Adequacy of commercial banks is measured by Capital Adequacy Ratio (CAR) which is the ratio of shareholders’ funds to total assets. Results from Table 4.2, 4.3 and 4.4 shows that, CAR for Larger Commercial Banks, Middle Commercial Banks and Small Commercial banks are 12.4%, 13% and 30% respectively. The results implies that, most of the selected commercial banks complied with regulatory requirement of maintaining Capital Adequacy ratio of at least 12.5%. Larger commercial banks had minimum CAR compared to middle and small commercial banks due to the fact that larger commercial banks have larger loan portfolio which bear larger risks, weighted assets which absorb capital soundness and stability of commercial banks. These results are more similar with general results from Table 4.1 which shows that, the average CAR for selected commercial banks was 16.5 within regulatory requirements. This is because the Bank of Tanzania have been ensuring that, all commercial banks are maintaining adequate capital of at least TZS 15 billion for stable and sound banking system in the country.

5.2.2.2 Liquidity Ratio
Loan to deposit ratio best describes the ability of commercial banks to handle maturity obligations while continuing with other operation activities. Results from Table 4.2, 4.3 and 4.4 shows that, Liquidity ratio is 147%, 142% and 103% for larger commercial banks, middle commercial banks and small commercial banks respectively. This implies that, during the period under review all commercial banks were not complying with maximum regulatory limit of 80%. General results on Table 4.1 shows that, the average liquidity ratio was 130% which also surpasses the maximum regulatory limit.
The results reveal that, commercial banks faced liquidity challenge to the extent that they were lending more than deposit collected from the customers. Liquidity condition of a commercial bank is one of the alarming factor that determine the soundness and sustainability of commercial banks in the country. Results from Table 4.2, 4.3 and 4.4 shows that, liquidity ratio ranges from minimum of 121% to a maximum of 193% for larger commercial banks and for middle commercial banks ranges from minimum of 77% to the maximum of 370% while form small commercial banks ranges from minimum of 15% to maximum of 191%. These results revealed that, most commercial banks maintain larger loan portfolio than the deposits available to settle immediate obligation and comply with maximum regulatory limit of 80% as regulated by Bank of Tanzania.

5.2.2.3 Non-Performing Loan Ratio
The asset quality of the commercial banks is measured by non-performing loan ratio (NPL). This ratio determines the efficiency of risk assets which are the major source of the income for the commercial banks. Results from Table 4.2, 4.3 and 4.4 shows that, NPL under the period of study were 7%, 9% and 4% for larger commercial banks, middle commercial banks and small commercial banks respectively. Among selected banks small commercial banks had lower NPL of 4% compared to larger and middle commercial banks, the reason might be the fact that small commercial banks had few years in operation to accumulate huge NPL as larger and middle commercial banks. The NPL depicted by both larger and middle commercial banks were above regulatory limit of 5%. However the average NPL for all commercial banks under the period of study as shown in Table 4.1 was 7.2% which again was above regulatory requirements. The performance of commercial banks much relies on the quality of risk assets it owns. The quality of these assets depends on how commercial banks assess them using 4Cs which are character, capacity, collateral and covenant of the borrowers. Failure to initiate proper policies and mechanism for assessing these 4Cs before disbursing loans to borrower results into Non-performing loans and shakses the performance of commercial banks.
Table 5.3 shows the extended results from Table 4.1 which shows the average NPL for selected commercial banks from 2011 to 2017. Results show that, in 2011 the average NPL for commercial banks was at the peak of 12% which was far away from regulatory limit of 5%. Thereafter commercial banks managed to reduce in 2012 to 2015% by 6%. From 2016 NPL started to rise to 7% and reached at the peak of 11% in 2017. This implies that, after reduction of NPL from 2016 commercial banks were exposed to larger risks where customers were not honoring their obligations and affected the performance of commercial banks. The total average of NPL was 7% as depicted in Table 5.3 which also is above regulatory limit of 5%.

Table 5.3: Average NPL for selected Commercial Banks

<table>
<thead>
<tr>
<th>Years</th>
<th>Average NPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>11%</td>
</tr>
<tr>
<td>2016</td>
<td>7%</td>
</tr>
<tr>
<td>2015</td>
<td>6%</td>
</tr>
<tr>
<td>2014</td>
<td>3%</td>
</tr>
<tr>
<td>2013</td>
<td>6%</td>
</tr>
<tr>
<td>2012</td>
<td>6%</td>
</tr>
<tr>
<td>2011</td>
<td>12%</td>
</tr>
<tr>
<td>TOTAL AVERAGE</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: Extract from audited published financial statements

5.2.2.4 Return on Assets (ROA).

ROA measures performance of commercial banks by determining the extent that assets are contributing to the bottom line (profit). It is measured by the ratio of net profit (Earning) to total assets.

Results from Table 4.2, 4.3 and 4.4 shows that, ROA for Larger Commercial Banks, Middle Commercial Banks and Small Commercial banks are 2%, 1% and -6% respectively. These results imply that, larger and middle commercial banks had better performance compared to small commercial banks which had negative return. However, the performance of commercial banks during the period under the study were not good as the results depicted that, there is no category of commercial banks (larger, middle and small) that had ROA of at least 5% which is the best benchmark when measuring performance of commercial banks using ROA. The average ROA as
shown in Table 4.1 was -0.4% meaning that, during the period under study assets of commercial banks especially earning assets were not efficiently managed to generate positive returns which is expectation of all commercial banks. Albeit negative returns might be caused by downtown economic activities and adverse relationship and results of independent variables. (Liquidity, capital, and asset quality)

5.2.2.5 Age
Age represents a number of years commercial banks have been operating since they were founded in United Republic of Tanzania. When commercial banks are granted commercial license to operate they need time to absorb initial operating and start-up cost in order to create conducive and smooth environment for sustainable growth. Commercial banks need enough time for their establishment and win market share by publicizing and advertising their products and service in order create strong customer relationship and gain competitive advantage in the market.

Results from Table 4.2, 4.3 and 4.4 shows that, the average age for Larger Commercial Banks, Middle Commercial Banks and Small Commercial banks are 37, 28 and 6 years respectively. These results revealed that, larger commercial banks have been operating for long period of time compared to middle and small commercial banks. Most of small commercial banks have been in the market for few years which led them to operate under poor market strategies, weak customer relationships and stiff competition which results into poor performance as reveled in their returns. Table 5.4 shows the number of years selected commercial banks have been operating in the United Republic of Tanzania where Barclays have been in the market for long period compared to other commercial banks while larger commercial banks like CRDB, NMB and Stanbic banks have an average of two decades in the markets and less than one decade for small commercial banks.
Table 5.4: Number of years of Commercial banks.

<table>
<thead>
<tr>
<th>Bank</th>
<th>Barclays</th>
<th>Citibank</th>
<th>CRDB</th>
<th>NMB</th>
<th>Stanbic</th>
<th>Akiba</th>
<th>Azania</th>
<th>BancABC</th>
<th>BOA</th>
<th>KCB</th>
<th>UBA</th>
<th>TPB</th>
<th>Letshego</th>
<th>Mkombozi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>93</td>
<td>23</td>
<td>22</td>
<td>21</td>
<td>23</td>
<td>21</td>
<td>23</td>
<td>22</td>
<td>21</td>
<td>9</td>
<td>93</td>
<td>8</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

5.3 Correlation Analysis between Dependent and Independent Variables

The relationship between dependent variable and those independent variables which affect the performance of commercial banks were tested and results found are depicted in the Table 4.5.

From Table 4.5 CAR had positive relationship with ROA to imply that, an increase in capital of the commercial banks will lead to increase in return on assets as well. Liquidity was negatively correlated with ROA which meant that, excess liquidity can be a result of lack of adequate investment opportunities which brought low returns and returns were increasing due to increase in loans while deposits were decreasing and led to liquidity distress in the financial institutions. NPL had a positive relationship with ROA and this stipulates that, an increase in loan lead increase in returns but at the same time most of customers were not able to honor their obligation and led an increase in non-performing loans while age were negative correlated with ROA.

5.4 Regression Analysis

The general objective of this study was to determine the major factors affecting performance of commercial banks in Tanzania. To archive this objective six years panel data for fourteen (14) commercial banks in Tanzania were analyzed using linear multiple regression model. Regression analysis results depicted that, CAR and NPL had positive relationship with ROA while Liquidity and Age had negative relationship with ROA.
Multiple regression analysis results are presented in Table 4.6 which depict that, the coefficient of R square was 0.2393 which demonstrate that, 23.93 percent of the variation in dependent variable was explained by independent variables of the model. Multicollinearity diagnosis test was performed to test if data suits the basic assumption of classical linear regression model.

5.4.1 Multicollinearity test
Multicollinearity occurs when predictor variables are highly correlated to the extent that they can affect the accuracy of regression analysis results in the model and becomes a challenge to rely on the results obtained.

Variance Inflation Factor (VIF) was used to measure the extent to which predictor variables (independent variables) in regression analysis model are related to the extent that they can adversely distort the results.

Multicollinearity test was performed to check if the explanatory variables are highly correlated. The Variance Inflation Factor (VIF) was used to support the validity of the regression results. VIF below 10 suggests that, there is no multicollinearity (Gujarati, 2004). However the VIF value which is above 10 indicates that, a collinearity problem exists and further investigation is recommended such as those variables which are much correlated or lead to multicollinearity to be removed or replaced with other variables in order to obtain accurate results. Table 5.5 shows the results which was used to test multicollinearity among the independent variables which are Capital Adequacy, Liquidity, Non-performing loans and Age.
Table 5.5: Multicollinearity Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>CAR</td>
<td>0.807</td>
</tr>
<tr>
<td>LQD</td>
<td>0.858</td>
</tr>
<tr>
<td>NPL</td>
<td>0.966</td>
</tr>
<tr>
<td>YEAR</td>
<td>0.907</td>
</tr>
</tbody>
</table>

Note: Values > 10.0 may indicate a collinearity problem.

Source: Extract from STATA work 2013.

Findings from Table 5.5 shows that, all VIF are below 2 and there were no VIF which were above 10 which implies that, there were no multicollinearity problem.

5.4.2 Hausman test

To decide either fixed model or random effect model to be used for this study, Hausman test was performed. The null hypothesis is that, the preferred model is random effect against the alternative fixed effect model (Green, 2008). The ruling decision is to reject the null hypothesis if the estimated probability of the results is less that 0.05 at 95% confidence interval. To test which model to adapt the null and alternative hypotheses below were tested and the results are depicted in table 5.6.

Ho: Random effect model is preferred to fixed effect model

Hi: Fixed effect model is preferred to random effect model

Table 5.6: Hausman test results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients</th>
<th>Difference</th>
<th>sqrt(diag(VbV_B))</th>
<th>Prob&gt;chi2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed(b)</td>
<td>Random(B)</td>
<td>b-B</td>
<td>SE</td>
</tr>
<tr>
<td>CAR</td>
<td>.0591297</td>
<td>-.0807196</td>
<td>.1398494</td>
<td>.0080214</td>
</tr>
<tr>
<td>LQD</td>
<td>-.0236057</td>
<td>-.0044492</td>
<td>-.0191565</td>
<td></td>
</tr>
<tr>
<td>NPL</td>
<td>.071786</td>
<td>.0395903</td>
<td>.0321957</td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>-.0001889</td>
<td>.0002854</td>
<td>-.0004743</td>
<td>.0012858</td>
</tr>
</tbody>
</table>

Source: Extract from STATA work 2013.
The findings revealed that, the test was statistically significant at 5% (p-value=0.000) which is below 0.05 and this led to reject null hypothesis (Ho) and adopt the fixed effect model for this study.

5.4.3 Fixed Effect Regression Model

Fixed effect regression model was used to study the effects of the independent variables (CAR, NPL, LQD and AGE) on the dependent variable (ROA). The results from the model are depicted in the table 5.7.

<table>
<thead>
<tr>
<th>ROA</th>
<th>Coef</th>
<th>Std. Err</th>
<th>T</th>
<th>P&gt;T</th>
<th>[95% conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>0.05913</td>
<td>0.0387846</td>
<td>1.52</td>
<td>0.131</td>
<td>-0.0180541</td>
</tr>
<tr>
<td></td>
<td>0.1363135</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIQD</td>
<td>0.236057</td>
<td>0.0077447</td>
<td>-3.05</td>
<td>0.003</td>
<td>-0.0390182</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0081933</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NPL</td>
<td>0.071786</td>
<td>0.0369468</td>
<td>1.94</td>
<td>0.056</td>
<td>-0.0017406</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.1453125</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGE</td>
<td>0.0001889</td>
<td>0.0013061</td>
<td>-0.14</td>
<td>0.885</td>
<td>-0.0027882</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0024104</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONS</td>
<td>0.0169497</td>
<td>0.0382416</td>
<td>0.44</td>
<td>0.659</td>
<td>-0.0591535</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0930528</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Extract from STATA work 2013.

The value for the R-square in the model (Table 5.7) is 0.2393, which demonstrates that, 23.93% of the variation in the dependent variable is explained by the independent variables of the model. The P-value for the F-statistics is 0.0056 and is significantly supporting the validity and stability of the model of the study.

The results suggest that, CAR has a positive but not significant relation with ROA. This implies that, the increase in capital have more chances to increase returns of the commercial banks. The results further revealed that, CAR has no significant relation with ROA to imply that, commercial banks cannot rely only on capital to increase returns, other factors must be considered to work in conjunction with the capital to boost performance of commercial banks. Capital enables commercial banks to absorb expected loss or credit exposure and keep the commercial banks sound and stable. These results concur with Ongore and Kusa (2013) results which depicted positive
relationship between Capital and profitability of commercial banks. However these results contradict with the results found in Fredrick (2014) and Cekrezi (2015) which found negative relationship between Capital and performance of commercial banks. According to these results increase in capital have high chance but not significantly to increase returns of assets of commercial banks as expected by the researcher.

Liquidity has negative and significant impact on performance of commercial banks contrary to the expectations. This implies that, commercial banks during the period under review were much relying on lending to increase returns on assets while number of bad debts were increasing which affected liquidity negatively. Commercial banks were not able to comply with regulatory requirement of maintaining a maximum of 80 percent loan to deposit ratio due to the fact that more returns were expected from increase of the loans which affected liquidity and performance of commercial banks. In addition to that commercial banks which had excess liquidity were afraid to provide loans due to sluggish economy and huge increase in non-performing loans which led to decreasing in returns of the commercial banks in Tanzania. This also indicated that, commercial banks may have excess liquidity but limited opportunities available for investing their funds and this demands commercial banks to be very careful when allocating their resource to these limited opportunities. These results are consistent with the results found in the study of Cekrezi (2015) which shows the existence of negative relationship between liquidity and ROA, but contradict with Musienga et al., (2017),Kosmidou (2008) and Arif (2012) results which found a positive relationship between liquidity and the performance of commercial banks.

NPL has a positive but not significant relation with ROA. This implies that, as the returns on assets for commercial banks were increasing also non-performing loans were increasing and the vice versa. Extracted data from audited financial statements of commercial banks as summarized in the table5.8 shows that, the average NPL was decreasing from average of 11.8 percent (2011) to 6 percent (2015) and ROA was also declining from average of 0.1 percent (2011) to -0.5 percent (2015). Thereafter
NPL started to increase to 6.6 percent (2016) then to 10.9 percent (2017) as the same applied to ROA to -0.02 percent (2016) then to 0.1 percent (2017). These results indicated that, commercial banks were struggling to improve their performance (returns) by booking more loans at the same time the level of non-performing loans was increasing. These results are not consistent with the study of Nkuru (2011), Kenneth and Omwono (2015) which indicated the existence negative relationship between NPL and ROA as expected by the researcher.

Table 5.8: Relationship between ROA and NPL

<table>
<thead>
<tr>
<th>Year</th>
<th>Average NPL</th>
<th>Average ROA</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>10.9%</td>
<td>0.1%</td>
</tr>
<tr>
<td>2016</td>
<td>6.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2015</td>
<td>6.0%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>2014</td>
<td>3.3%</td>
<td>-1.2%</td>
</tr>
<tr>
<td>2013</td>
<td>5.9%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>2012</td>
<td>5.6%</td>
<td>-0.8%</td>
</tr>
<tr>
<td>2011</td>
<td>11.8%</td>
<td>0.1%</td>
</tr>
<tr>
<td>TOTAL AVERAGE</td>
<td>7.2%</td>
<td>-0.4%</td>
</tr>
</tbody>
</table>

Source: Extract from audited published financial statements

Results from the model revealed that, age has a negative but not significant relationship with ROA. This implies that, age have no significant influence on the performance of commercial banks in Tanzania. These results are the same as the study of Cekrezi (2015) which depicted that, age was not a significant factor to take consideration in analyzing the performance of commercial banks in Albania.

Based on regression results depicted in table 5.6 the model of this study can be summarized by regression equation below.

**Empirical model:**

$$\text{ROA} = 0.0169 + 0.0591\text{CAR} - 0.0236\text{LQD} + 0.0718\text{NPL} - 0.0002\text{AGE}. $$

Where:

ROA: Returns on Asset
CAR: Capital Adequacy Ratio
LQD: Liquidity
NPL: Non-performing loans

The model depicted that, 0.0591 increase in CAR can lead to the increase of ROA by 1 unit point which implies that, CAR and ROA are passively related. Increase in 0.0236 of the liquidity will result to the decrease of 1 point of ROA and LQD and ROA are negatively related while 0.00718 increase in NPL will lead to the decrease of 1 point of ROA and an increase of 0.0002 of the age will lead decrease of 1 point of ROA.

The results from the model shows that, two variables which are CAR and NPL had positive relationship with ROA while liquidity and age were negative correlated with ROA.

Table 5.9: Summary of the findings

<table>
<thead>
<tr>
<th>S/No</th>
<th>Hypothesis</th>
<th>P-Value</th>
<th>Empirical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>H1: There is no significant relationship between capital adequacy and performance of commercial banks</td>
<td>0.131</td>
<td>Do not Reject null hypothesis</td>
</tr>
<tr>
<td>2</td>
<td>H2: There is no significant relationship between liquidity and the performance of commercial banks</td>
<td>0.003</td>
<td>Rejected</td>
</tr>
<tr>
<td>3</td>
<td>H3: There is no significant relationship between non-performing loans and performance of commercial banks</td>
<td>0.056</td>
<td>Do not Reject null hypothesis</td>
</tr>
<tr>
<td>4</td>
<td>H4: There is no significant relationship between age and performance of commercial banks.</td>
<td>0.885</td>
<td>Do not Reject null hypothesis</td>
</tr>
</tbody>
</table>


According to the findings as shown in the summary table 5.9 above, three independent variables (CAR, NPL and Age) depicted the same results as predicted. It was predicted that, H1, H3 and H4 will not have significant relationship with ROA and after they were hypothesized reflected the expected results.
However the second hypothesis (H2) was tested and results depicted that, there is a significant relationship between liquidity and performance of the commercial banks in Tanzania contrary to what was predicted hence rejecting H2. This result implies that, liquidity affected the performance of commercial banks during the period of review. Liquidity was measured by ratio of loan to deposit and found that, commercial banks had tight liquidity condition to the extent that they were not complying with regulatory requirements and affected their operations and performance.

Findings from the study revealed that, liquidity is a key and a drive that influence the performance of commercial banks in Tanzania. Therefore, for the commercial banks in the country to operate smoothly and earn higher return they have to make sure that they have adequate liquidity condition.
CHAPTER SIX

SUMMARY, CONCLUSIONS AND POLICY IMPLICATIONS.

6.1 Introduction
This chapter provides clearly the summary, conclusion and various recommendations to be adopted by policy makers and other stakeholders on improving the performance of commercial banks in Tanzania. Various factors affecting performance of commercial banks in Tanzania have been summarized and areas for further studies have been recommended by the researcher.

6.2 Summary
The study was about the factors affecting the performance of commercial banks in Tanzania. Four major factors which are Capital Adequacy, Liquidity, Non-performing loans and age were used to determine the extent to which they affect performance of commercial banks in Tanzania. The study used panel data of audited financial statements of 14 commercial banks in United Republic of Tanzania from 2011 to 2017 and various ratios were computed to assess the performance of commercial banks in Tanzania.

STATA software was used to analyze audited financial data for selected commercial banks and the results revealed that, Capital, Liquidity, Non-performing loans and Age were the major factors which affected the performance of commercial banks during the period. Results further revealed that, larger commercial banks had huge NPL which hit their returns compared to middle and small commercial banks. Also results revealed that, most of small commercial banks have not been in the market for many years compared to larger and middle commercial banks which made them to have small market share and record lower return than larger commercial banks. During the period under study it was revealed that, all category of commercial banks were facing liquidity challenge as all of them were not complying with regulatory requirements.
Larger commercial banks were found to have good performance compared to middle and small commercial banks as they reported more than double returns compared to the other commercial banks. This implies that, larger commercial banks have more efficiency assets management which provide more returns than middle and small commercial banks.

6.3 Policy Implications and Recommendations
Commercial banks play a vital role in national economy development by acting as intermediaries for connecting those areas with surplus fund with those areas with deficiency in funds. Through commercial banks it becomes easy for the country to accelerate various economic development by flowing fund from surplus area to deficit areas. The government through central banks regulate economy of the country and implements various policies to ensure that, there is stable and sound economy in the country. Macro-economic policies operate well if there is stable and sound financial system in the country. This study has revealed that, various regulations and policies for controlling commercial banks need to be reviewed in order to improve performance of commercial banks in the country.

6.3.1 Liquidity management policies
Results revealed that, commercial banks are lending more than the deposit available for meeting maturity obligations while keeping them stable. Most of their loan to deposit ratio is above regulatory limits which seem to be critical and can affect the performance of commercial banks. The existing liquidity regulation seem to be not properly adhered by commercial banks which lead to liquidity distress in the market.

The central banks have introduced two major liquidity regulations for monitoring liquidity conditions for commercial banks which are ensuring that, the current asset to current liquidity do not fall below 20 percent and loan to deposit ratio do not exceed 80 percent. When commercial banks fail to maintain the minimum regulatory limits, it means that, they are already in a critical condition which create discomfort to their customers.
The central banks should create a regulation of limiting commercial banks which have surpassed regulatory limit on issuing new loans until they regularize the condition. Through this regulation, it will be easy for the central banks to be aware of those commercial banks which have liquidity distress from initial point and oversee them to safeguard depositors. This will enable central bank to know the appropriate time to adopt expansionary monetary policy and when to adopt contractionary monetary policy in the economy.

6.3.2 Credit Risk Management

Commercial banks are exposed to huge credit risk due to poor monitoring and evaluation of the borrower from the initial point. Most of the non-performing loans are a result of lack of adequate and proper information about the borrower from the beginning. Commercial banks are putting more effort to minimize credit risk after the loan has been already disbursed rather than before which affects the performance of commercial banks. Huge credit risk exposure in commercial banks affect macro-economic variables such as inflation, interest rates and balance of trade due to the fact that commercial banks play important role in ensuring proper balance of these variable in the economy.

To maintain stable macro-economic variables which will attracts the development in the country, proper mechanism must be established by both central government and commercial banks which will reduce credit risks resulting from having poor information about the borrower from the beginning.

6.3.3 Favorable relationship with customers

Commercial banks in Tanzania should come with innovative ways of dealing with their customers rather than waiting until when the challenge arises. Commercial banks should establish a tendency of participating in business meetings and other social activities of their borrowers as means of initiating and building strong relationship with their borrowers. This will help commercial banks to have strong bond and wide knowledge of their clients which will reduce NPL caused by poor communication and knowledge gap with the borrowers.
6.4 Limitations and Scope for further Studies.

This study focused on determining the factors affecting the performance of commercial banks in United Republic of Tanzania. A researcher focused more on the quantitative factors which involves more statistical methods for analyzing data. Quantitative methods were used to compute various ratios such as Capital Adequacy Ratio, liquidity Ratio and Non-performing loans Ratio using audited financial statements of selected commercial banks under the period of study. Multiple regression method was used and results depicted that, CAR, LIQD, NPL and age are among the factors affecting the performance of commercial banks in Tanzania. However it is difficult to get qualitative information such as organization culture, employee morale and technological innovations from audited financial statements which could be helpful in determining factors affecting performance of commercial banks. The researcher found that, qualitative factors such as management efficiency, employee motivation, technology and working environment could add value if they were included in this study because they are among factors which might affect the performance of commercial banks. Therefore, this study leaves a room for the other researcher to conduct the same study with inclusion of qualitative factors and compare the results with findings of this study.

Based on the findings the researcher observed that, internal factors which affect the performance of commercial banks in Tanzania were Capital Adequacy, Liquidity Non- performing loans and Age which were within the control of respective commercial banks. The researcher is recommending that, comprehensive study for external factors affecting the performance of commercial banks such as inflation and GDP can be conducted in order to get more insights on which factors exactly affect the performance of commercial banks in Tanzania.

6.5 Conclusions

The empirical study revealed that, capital adequacy, liquidity, non-performing loans and age influence the performance of commercial banks in Tanzania. Albeit liquidity found to have significant influence compared to other factors. This indicate that,
efficient and effective allocation of fund create smooth environment for commercial banks to handle operative activities while investing in productive investments for higher returns. The study found that, commercial banks were lending more that, their ability to generate deposits which led them into liquidity distress which affect the performance of commercial banks. Lending to customers (loans, advance and overdraft) were increasing but also the number of customers who were not able to honor their obligations were increasing due to deterioration of the economic activities and deviation of fund from core business. This led to the increase in non-performing loans which affected the liquidity condition and the performance of commercial banks. Therefore, commercial banks need to establish proper mechanism which will ensure optimum allocation of their fund to avoid huge credit exposure which adversely affect their performance.

The study found that, there was positive relationship between performance and non-performing loans for the commercial banks in Tanzania under the period of study. This means that, as the ROA was increasing also non-performing loans were increasing. The increase of the loans led to an increase of returns (earning) but at the same time the number of customers who were not paying their instalments were increasing which led to an increase of NPL. This implies that, not every increase of loans and advance will improve the performance of commercial banks but efficient and effective allocation of fund. The provision of loans should correspond with growth of economic activities and government policies to determine the extent borrowers are capable of serving their obligation. Other variables such as liquidity and age had negative relationship with ROA with the exception of CAR which had positive relationship.

Therefore, based on this study it can be concluded that, internal specific factors such as Capital, Liquidity and asset quality which are under the control of the commercial banks affect the performance of the commercial banks. Banks need to ensure proper management of these internal factors to avoid adverse impact on their performance.
REFERENCE.


## APPENDICES

### Appendix 1: Loans, Advance and Overdraft (Net) “Amount in millions of TZS

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Appendix 2: Total Assets \* Amount in millions of TZSH

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## Appendix 3: Total Customer Deposits *Amount in millions of TZSH*

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