ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF RISK MANAGEMENT PRACTICES: THE CASE OF DEBUB GLOBAL BANK S.C

BY

LEMLEM KETEMA AREDA

JUNE, 2023

ADDIS ABABA, ETHIOPIA

ASSESSMENT OF RISK MANAGEMENT PRACTICES: THE CASE OF DEBUB GLOBAL BANK S.C

BY

LEMLEM KETEMA AREDA

ADVISOR

TAYE AMOGNE (phD)

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

JUNE, 2023

ADDIS ABABA, ETHIOPIA

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES

ASSESSMENT OF RISK MANAGEMENT PRACTICES: THE CASE OF DEBUB GLOBAL BANK S.C

BY

LEMLEM KETEMA AREDA

APPROVED BY BOARD OF EXAMINERS

_______________	________________	______________
Dean, Graduate Studies	Signature	Date
_______________	________________	______________
Research Advisor	Signature	Date
______________	_______________	_______________
External Examiner	Signature	Date
_________________	_______________	________________
Internal Examiner	Signature	Date

DECLARATION

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

Lemlem Ketema Areda ____________________

Name Signature

St. Mary's University, Addis Ababa June, 2023

ENDORSEMENT

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

Taye Amoge (Dr.) ____________________

Advisor Signature

St. Mary's University, Addis Ababa, June, 2023

ACKNOWLEDGEMENTS

First and foremost, I would like to thank God for his grace, mercy and provision. My sincere appreciation goes to my advisor Taye Amogne (phD) for his unreserved comments and constrictive guidance to bring this thesis to reality. My heartfelt gratitude goes to my husband who helped me while I was working on this thesis.

Tables of Contents

ACRONYMS

ALCO	Asset-liability management committee
BCBS	Basel Committee on Banking Supervision
CBE	Commercial Bank of Ethiopia
CL	Clean based loans
CR	Credit Risk
DGB	Debub Global Bank
EFIS	Ethiopian financial Intelligence Service
ITDE	Interest on time deposit to interest expense
IRR	Interest-rate risk
LR	Liquidity Risk
LDR	Loans to deposit ratio
MIS	Management information system
NBE	National bank of Ethiopia
NPL	Non-Performing loans
OECD	Organization for Economic Cooperation and Development
OR	Operational Risk
RMCD	Risk Management and Compliance Division
ST	Short Term loans
TD	Time deposit
TB	Top borrowers
USD	The US Dollar
WB	World Bank

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

The purpose of this study was assessing the risk management practice in the case of Debub Global Bank of Ethiopia using twenty quarters of data between the year 2018 and 2022. This assessment includes variables such as non performing loans ratio, loans issued on clean basis, short-term loan ratio, loans allocated to top borrowers, time deposit ratio, loan deposit ratio, and interest expense ratio. In doing this descriptive research design, qualitative research approach was used. The data collected from the bank's risk and compliance department quarterly generated reports. The study relied on secondary data. The collected data was analyzed with descriptive statistics such as Percentage, mean and standard deviation through STATA version13 software. The data presented in tables and graphs. The findings reveal that the bank is not operating within the internal limit set by its risk management program and that it needs to take steps to reduce the gap. The recommendation made in line with the findings includes that the bank should attempt to regularly update its risk limit and should keep working within the set limit.

Keywords: Non performing loans ratio, clean based loans, short-term loan ratio, top borrowers, time deposit ratio, loan to deposit ratio, and interest expense ratio.

CHAPTER ONE

INTRODUCTION

This chapter presents background of the study, statement of the problem, research objectives, significance of the study, scope and limitation of the study, and operational definition of terms and organization of the study.

1.1. Background of the study

The healthy growth of a country's economy depends on the healthy growth of that country's banking sector (Zervos, 1988). According to (Choudhury, 2020), in the growth of an economy, the banking sector is crucial. Banks operate as a "middleman" in transactions while simultaneously offering financial services, however this role exposes the banks to a variety of dangers. The rationale for managing these risks is the first step in the risk management paradigm.

Core management principles are intended to maximize the wealth of the shareholders, in accordance with economic theory, and this concept ought to also maximize the anticipated profit from their firm. Losses resulting from actions that violate the organization's basic values and improper risk management could have a direct impact on the bank's profitability and stability. (Tursoy, 2018).

The establishment and operation of an adequate and efficient internal audit, internal control, and risk management system that is compatible with their operations and structure in accordance with changing conditions, covering all branches and departments, is necessary for the banks to monitor and manage the risks to which they are exposed. (Gündüz, Risk Management in Banking Sector, October, 2020)

Since risk and return are inversely correlated, a bank can anticipate increasing its profits by taking on greater risk. (Frank J. Fabozzi, 2002).But higher risk also raises the possibility that the bank could suffer significant losses and have to close its doors. Therefore, banks make an effort to guarantee that their risk-taking is calculated and responsible. Risk management's job is to maintain a trade-off between risks and return (Frank J. Fabozzi, 2002).However, greater risk also increases the chance that the bank could sustain severe losses and be forced to collapse. Banks therefore make an effort to ensure that the risks they take are reasonable and responsible. Maintaining a trade-off between risk and return is the responsibility of risk management.

The principal concern of this paper is to assess the risk management practices of Debub Global Bank S.C in the past five years from 2018 to 2022 using the quarterly produced risk and compliance reports of the bank. The Bank has an independent risk management department to take the lead on the identification and, measurement, mitigation and monitoring of risks. It provides focus on key banking risk types including credit, liquidity, and market risks measuring their level, setting the quality of risk management and pointing the risk directions.

1.2. Statement of the problem

According to (Choudhury, 2020), the growth of an economy depends heavily on the banking industry. It is the main force behind the nation's economic expansion and has a pivotal part to play in converting idle capital resources for their best possible use to achieve maximum productivity. Since risk and return are inversely correlated, a bank can anticipate increasing its profits by taking on greater risk. (Frank J. Fabozzi, 2002).But higher risk also raises the possibility that the bank could suffer significant losses and have to close its doors. Therefore, banks make an effort to guarantee that their risk-taking is calculated and responsible. Risk management's job is to maintain a trade-off between risks and return (Frank J. Fabozzi, 2002).However, greater risk also increases the chance that the bank could sustain severe losses and be forced to collapse. Banks therefore make an effort to ensure that the risks they take are reasonable and responsible. Maintaining a trade-off between risk and return is the responsibility of risk management.

Banks are exposed to many types of risks that can negatively impact their activities and performance. Therefore, it is necessary to promote and maintain the safety and soundness of their operation in a proactive and rigorous manner. The banking industry, therefore, is a regulated sector due to the riskiness of its operation. Bank risk management is thus becoming an industry discipline that all participants and players should follow.

While Ethiopia's banking system is still underdeveloped, it has experienced significant growth in recent years. The national bank of Ethiopia prepared and circulated a risk management guideline to all banks operating in Ethiopia in 2010 (NBE, 2010). The aim of the document was to let all banks have consistent risk management as per international standards and best practices. The guideline provides for all banks to have the minimum risk management (risk identification, measurement, monitoring and control) standards. The initiation comes after the survey result conducted by the NBE in 2009 (NBE, 2009).

The survey conducted by the National Bank of Ethiopia (NBE) in 2009 aimed to identify the status of risk management practices by banks and to put forward recommendations to address weaknesses. The survey result shows that 60% and 74% of banks have not yet documented risk management strategies and programs, respectively. The majority (60%) of banks risk management policies do not define and quantify the appetite for risk, suggesting a limited aspect of risk control. Even the vast majority (93%) of that 40% of banks, who claimed to have policies with defined risk limits just use NBE limits for counterparties (single, related, etc) without having their own, or more than 3/4th of them failed to define limits for geography, product, security, sector, and others (NBE, 2009).

Research on the risk management practices of banks in Ethiopia is limited and focused on the importance of risk management in the banking industry. However, some studies have assessed particular types of risks based on respondents. Researchers including (Lidiya, May,2019), (Amsale, June,2019), (Ahmed, December, 2018), (Kebede, June, 2020), (Kollie, February, 2022), (Daniel, July, 2017), (Wood & Kellman, 2013), (Gebretatiyos, November, 2021)have studied risk management practices of individual private banks and the public bank, CBE and found that despite a lot of practices implemented by individual banks, the common risks; Credit risk, operational risk, interest rate risk, market risk and foreign-exchange risks still persist and remain significant.

Majority of the researches used qualitative design and come up to the conclusion based on the respondent's argument. The researcher believes that a mere conducting of interview and take the response as a grant to determine the risk in the bank is not enough. Because of each risk have their indicating variables to be analyzed and interpreted. In addition to this, the reviewed studies used and focused by taking one single or two variables. The Office of the Comptroller of the currency, which is an independent bureau of the U.S. Department of the Treasury, identified 9 risks in banking (OCC, 2023). The risks are Credit, Interest Rate, Liquidity, Price, Foreign Exchange, Transaction, Compliance, Strategic and Reputation. It is known that proper management of overall risks that may commonly arise in bank has needed to investigate to ensure better performance and sound operation. Thus, the more the number of risk indicator/ variable included in the study the more will be the level of identifying the risk management practice of the bank under study.

To this end, the researcher tries to examine the risk management practices of Debub Global Bank by assessing trend of selected seven variables for 20 quarters. Credit risk: Non-performing loans ratio, Short term loans, Clean based loans, and Top borrowers – Liquidity Risk, loans to deposit ratio, and Time deposit –Interest rate risk; interest on time deposit to interest expense.

1.3. Objective of the study

1.3.1. General Objective

The overall objective of this research is to assess risk management practices of Debub Global Bank S.C.

1.3.2. Specific Objective

- To assess the major risk exposures faced by the bank
- To evaluate the effectiveness of the bank in its internal risk management practices
- To evaluate whether the bank's risk management practice is in conformity with the National bank requirement

1.4. Research questions

- What are the major risks faced by the bank?
- How the Bank does is effective in its internal risk management practices?
- How does Bank risk management practice in line with the National Bank of Ethiopia Risk guideline?

1.5. Significance of the study

This study focuses on the general risk management practice by Debub Global Bank. The findings from the study serves as an element of decision to take corrective action by the bank and used as a reference and lesson learning by other private and public banks in

Ethiopia. The assessed gaps used as an input by other researchers interested in studying the area of risk management practices in Ethiopian banks.

1.6. Scope of the study

When we talk about risk management it touches every kind of firms or industries, i.e. financial industries which are banks, finance houses, investment banks, insurance companies and other financial intermediaries. This research is focused on assessing the risk management practices of banking industry specifically in Debub Global bank excludes other institutions and the private owned banks.

1.7. Limitation of the study

The limitation of the study is an availability of full data from the beginning of the bank operation and due to time and the confidentiality of each and every sensitive variable unable to discover all risks that may hinder the performance and profitability of the Bank.

1.8. Operational Definition of Terms

Non-performing loan:

The National Bank of Ethiopia Directive number SBB/69/2018 defines the Non-performing loans as a loan whose credit quality has deteriorated such that full collection of principal and/or interest is not made for 90 consecutive days.

Clean loans:

Loans and advances availed without pledging collateral.

Liquid assets:

It includes cash, deposits with the National Bank and other local and foreign banks that it accepts, other assets that can be quickly converted into cash expressed and payable in Birr or foreign currency that the National Bank accepts (NBE, 2014).

Short term loans: The National Bank of Ethiopia Directive no. SBB/69/2018 defines short term loans as loans and advances with repayment or maturity period of 1 (one) year or less.

1.9. Organization of the study

The study has five chapters. The first chapter is the introduction part with the statement of the problem, objectives of the study, research question. The second chapter is about the literature review having two parts that accommodates the theoretical and empirical evidence. The third chapter presents the methodology that is used in the study. Then the fourth chapter presents the results and findings. And finally, the last fifth chapter presents the conclusions and recommendation of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter summarizes the information from the available literatures in the same and related fields of study. It reviews theories of risk management as well as empirical studies on risk management in Ethiopia and in other countries.

2.1. Theoretical Literature

2.1.1. Definition of Risk

The term “risk” has so many definitions by various institutions based on their ideology, area of engagement and tolerance. The Oxford university press has put a definition for risk in its Oxford dictionary as ‘*the possibility of something bad happening at some time in the future; a situation that could be dangerous or have a bad result* (Oxford University Press, 2023).

In (ISO, 2009) risk defined as “*effect of uncertainty on objectives*” which means the likelihood of something occur could impacts the objectives, it is the possibility to either make a gain or a loss. It is the combination of the probability of an event and its consequences or a combination of the probability and scope of the consequences. That is inability to precisely determine what will occur in the future, risk can have both an upside and a down side (Sharma, Chami, & Khan, 2003).

Risk is an uncertain consequence of an event or activity related to something of human value (IRGC, 2023). It is inherent in all areas of human endeavor risk is present in everyday commercial and personal activities risk results from the presence of more than one potential outcome from a course of action. The concept of risk management consists both of preventing and minimizing the occurrence of certain events and also in their system of identification, evaluation and quantification. Moreover, the risk management goes through development stages, being of great usefulness nowadays in the implementation of measures for diminishing losses that might occur (IRGC, 2023).

2.1.2. Risk Management in Banks

In the 1990s, the idea of risk management in banking first emerged (Tursoy, 2018). Prior to the 1990s, however, insurance-related strategies and dangers were explained using the concept of risk management. This type of risk management refers to the acquisition of conventional insurance policies that are appropriate for any occurrences to safeguard against potential risks (Hafeth, 2019).

When the Basel Committee on Banking Supervision (BCBS) released the "core principles" for efficient banking supervision in 1997, risk management in banking became essential (BCBS, 1990). Theoretically, "the logical development and execution of a plan to deal with potential losses" is how risk management in banking is defined (Tursoy, 2018). In the banking business, managing an institution's exposure to losses or risk and preserving the value of its assets are typically the main goals of risk management strategies. Banking is generally thought of as a dangerous industry.

The worldwide financial industry is growing, and new banks are opening up every day. This, together with the global financial crises, makes it crucial to assess the risk levels of banks and how they affect their performance. The banking industry entails accepting risks while ensuring that the effects of deposits, loan approvals, and trading portfolios are minimized. (Jaiye, 2009 cited in (Dei, Ofosu-Hene, & Amoh, 2016).

According to (DGB, 2019) Risk management involves a series of logical steps, such as risk identification, risk assessment/measurement, monitoring, and management strategies, as well as risk mitigation using a variety of techniques with the aid of managerial and technological resources, in order to manage uncertainty regarding business operations and reduce losses.

(Tursoy, 2018), Described the goal of risk management procedures in the banking sector is to control a company's exposure to losses or other risks and to safeguard the assets' market value. The banking sector is heavily regulated, and its regulators are thorough and dedicated. While regulators struggle to manage their workload and properly oversee their institutions, banks struggle to keep up with the changes in the regulatory environment. These modifications have the effect of reducing the amount of time regulators spend working directly with banks, the likelihood of more issues falling through the gaps, and perhaps even an overall rise in bank failures.

Jaiye (2009) cited in (Dei, Ofosu-Hene, & Amoh, 2016) mentioned that risk management for accepting deposits, making loans, and trading portfolios is the core activity of banking. Banks and thrifts are significantly impacted by the shifting economic environment because they find it difficult to successfully manage their interest rate spread in the face of low loan rates, competition for deposits, general market changes, industry trends, and economic swings.

Maintaining appropriate profitability ratios of the safety and liquidity parameters in the management of assets and liabilities is the primary goal of banking risk management (Galyna Chornous, 2013).

According to (NBE, 2010)a setup that supervises overall risk management should be put in place by the institutions' risk management function, and it should be in charge of managing operational risks. Depending on the size and complexity of the institution, such a system can take the shape of a risk manager, committee, or department. The institution's overall risk management role should be separate from those who take or accept risks on its behalf. The risk management role is in charge of making sure that efficient procedures are in place for identifying current and emerging risks;

2.1.3. Key Bank risks

The Office of the Comptroller of the Currency, an independent bureau of the U.S. Department of the Treasury has defined nine categories of risk for bank: Credit, Interest Rate, Liquidity, Price, Foreign Exchange, Transaction, Compliance, Strategic and Reputation (OCC, 2023). These categories are not mutually exclusive; any product or service may expose the bank to multiple risks. The Bank of England makes the risk type to three: Credit risk, market risk and operational risk (Bank of England, 2020). While (Bessis, 2015)states that Credit risk, market risk, interest rate risk, liquidity risk, and operational risk are all addressed through enterprise risk management.

i. Credit Risk

Credit risk is the most recognizable risk associated with banking. This definition, however, encompasses more than the traditional definition associated with lending activities (OCC, 2023). Credit risk occurs when the bank customer failing to fulfill its obligations partially or completely on time by not complying with the credit contract requirements. This kind of financial loss results from the failure of credit customers to repay the banks (Tursoy, 2018).

The credit risk is found in all activities where success depends on counterparty, issuer, or borrower performance. It arises any time bank funds are extended, committed, invested, or otherwise exposed through actual or implied contractual agreements, whether reflected on or off the balance sheet (OCC, 2023).

Credit risk is therefore the main factor behind bank failures. (Greuning & Bratanovic, 2020).

ii. Operational Risk

The operational risk is the potential for losses due to omitted mistakes and irregularities b rought on by internal control disruptions, the failure of bank management and staff to act in a timely manner, management errors, information technology system errors and failure s, and natural disasters like earthquakes, fires, floods, and terrorist attacks. (Gündüz, 2020).

For banks, managing operational risk poses some particular difficulties. The causes or risk factors may not always be appropriate because operational risk occurrences tend to occur within institutions. Moreover, it is frequently difficult to forecast the size of prospective losses due to particular risk variables. The idea that it is difficult to get management to concentrate on the frequently tedious labor required to build an effective method for routine reporting of trends for bank's operational risks is a result of the perception that very high operational losses have been thought of as being unusual or isolated instances (WB, 2020).

iii. Liquidity Risk

Liquidity risk is the risk to earnings or capital arising from a bank's inability to meet its obligations when they come due, without incurring unacceptable losses (OCC, 2023), (NBE, 2010). When banks are faced with liquidity problems, they need to borrow funds immediately with extra cost in order to meet their cash needs. This kind of funding is usually done by the lender of last resort or interbank markets. Immediate fund needs can be covered by the central banks or other sources, but this process leads to additional costs for the banks and reduces their earnings (Tursoy, 2018).

Liquidity risk includes the inability to manage unplanned decreases or changes in funding sources. It also arises from the bank's failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value (OCC, 2023).

By regulating the loan-to-deposit ratio and keeping loan sizes within a given range relative to deposits, the legislation essentially serves as a tool for managing banks' liquidity (NBE, 2010). However, this restriction is utilized to limit any expansion in lending during an economic expansion (BIS, 2012). The asset-liability management committee (ALCO) of a bank typically manages liquidity risks; as a result, the ALCO must have a full awareness of the interactions between liquidity and other market and credit risk exposures on the balance sheet (Greuning & Bratanovic, 2020).

iv. Interest Rate Risk

Interest rate risk is the probability of loss that the bank may be exposed to depending on the position of the bank due to movements in interest rates (Gündüz, 2020). Nowadays, interest rates are changing based on the supply and demand conditions. Under these circumstances, movements of the interest rates which banks are using for their activities also have effects on the banks incomes and expenses. Some of the banks’ assets are generating interest revenues such as loans and security investments; while on the other hand, some liabilities also have expenses like deposits. Therefore, the changing interest rates have had a substantial impact on the banks’ profits. Consequently, this is called interest rate risk (Tursoy, 2018).

2.1.4. Risk management Process

Every institution's primary discipline, risk management, covers all the actions that have an impact on its risk profile. The purpose of risk management is to optimize the risk-reward trade-off, not to minimize risk as is often believed. This can be accomplished by setting up an efficient framework for risk management that can effectively identify and control all hazards to which an organization is exposed. Risk Identification, Risk Measurement, Risk Control, and Risk Monitoring are the four main procedures that make up risk management. (Bank of Tanzania, Directorate of Banking Supervision , 2010)

According to (NBE, 2010) no single risk management solution would be appropriate for all banks. As a result, the NBE mandates that every bank create a comprehensive risk management system that is unique to its requirements and situation.

According to (DGB, 2019) risk program, the Internal fraud, external fraud, workplace safety and employment practices, customers, products, and business practices, business disruption and system failures, physical asset damage, and failure in execution, delivery, and process management are examples of operational risk event types that have the potential to cause significant losses.

2.1.5 Risk Program in the Debub Global Bank

Debub Global Bank S.C.is a privately owned share company which is established in August, 2012 and started operation on August 28,2012 with a subscribed capital of birr 266.9 million and a paid-up capital of birr 138.9 million. Currently, the Bank has a total capital of birr 426.63 million and paid up capital of Birr 237.5 million. The bank has 18,212 shareholders and has the total number of employees around 2,333 and the total number of branches reached 133 by serving more than 607, 670 customers (Debub Global Bank Sc, 2021/22).

According to the Bank’s annual report (Debub Global Bank Sc, 2021/22) risk management process remained one of the Bank’s primary focus areas during the year, with the goal of effectively managing inherent risks triggered throughout the various business processes and activities. In alignment with all internal policies, procedures, rules and directives issued by NBE, the bank has embarked on a comprehensive risk management program to identify measure, monitor and control potential risks and recommend mitigation techniques for risks that could potentially impede accomplishments of credit, liquidity, foreign exchange, interest rate and other operational objective of the bank. In addition, to help and comply with global and national attempts to counter suspicious financial transactions, the bank has been working on the established framework of the Ethiopian financial Intelligence Service (EFIS) to combat money laundering and terrorist financing.

2.2. Empirical Literature

(Lidiya, May,2019)Conduct a study to assess risk management practice in commercial bank of Ethiopia. The objective of the study was to analyze the risk management practice of CBE by examining the techniques adopted to mitigate major risk types. A qualitative type of research approach was employed and according to the respondents, the findings shown that Credit Risk (CR), Operational Risk (OR) and Liquidity Risk (LR) are the three risk types identified as major risks that CBE is exposed to. Liquidity risk is also potential risk that the bank is exposed to as stated and ranked third. Market and interest rate risks are not free of impacts but the prevalence and damage it causes to the bank is less than credit and operational risks.

(Amsale, June,2019) Carried out a study Risk management practice in the case of commercial bank of Ethiopia using a qualitative research approach, namely a structured questionnaire, was used to collect data. The questionnaires were prepared and distributed to three departments. The study revealed that credit risk management practices the average mean value of all item is 4.11 this result shows commercial bank of Ethiopia is good in credit risk management practice. The average mean score of liquidity risk management is 3.96 this indicates the bank has good liquidity risk management practice. The operational risk management practice over all items average value is 4.15 it indicates the bank has good operational risk management practice. The strategic risk management practice average mean score of all items is 3.54 this implies the bank has good practice and the reputational risk management practice average mean score is 3.67 this also implies the bank has good reputational risk management practice but these result does not mean the risk management practice is perfect, there are items it needs some reformations as per the research finding which are contingency plan, ongoing monitoring system, work place and employees satisfaction, the banks key risk indicator and tolerance level, identifying strategic 60 risks these variables have the smallest mean value. The researcher concludes the bank has good risk management practice.

(Ahmed, December, 2018) conducted an assessment and evaluation of Credit Risk Management in the united bank in Ethiopia. The findings revealed that the credit risk management properly applied in all united bank branches, the bank use different quantitative and qualitative method of measurement to assess the possible occurrences of credit risk.

(Kebede, June, 2020) Conduct a study on risk management practice on Debub Global Bank S.C. The researcher collected primary data through questionnaires and interview to evaluate the banks risk management and practices as a tool and based on the confirmation of the respondents the findings of the research identify Credit risk, liquidity risk and strategic risk are major risks in the bank as witnessed by majority of respondent’s response rate of 66%, 65% and 55% respectively. Whereas respondents rated market risk, operational risk, foreign-Exchange risk, technology risk, legal and regulatory risk and interest rate risk as moderate with a response rate of 40(52%), 36 (47),39 (51%), 45 (59%), 42 (55%) and 46 (60%) respectively. Moreover, reputation risk, Equity/commodity price risk and solvency risks are rated by respondents as low risk in the bank as confirmed by response rate 40 (52%), 47 (61) and 42 (52%) respectively.

(Kollie, February, 2022) Has investigated risk management practices in Abay Bank in Ethiopia. The main objective of the study was to examine risk management practices in Abay bank. The research was purposively select 5 managers from head office, and 129 employees based on their working experience. The findings of the research identify the Bank, just like other financial institutions is exposed to a variety of financial & nonfinancial risks. Because of this the bank has established a well-constructed risk management infrastructure and is following government (NBE) regulations. The program/infrastructure contains active board and senior management oversight, adequate policies, procedures, and limits; adequate risk monitoring and management information system; and adequate internal control. Hence, the bank has put in place an effective risk management strategy for managing operational, liquidity, credit, and market risks.

(Daniel, July, 2017) conduct assessment on the practices of credit risk management and its effect on the financial performance of banks in Ethiopia by using quantitative approach and purposive sampling method and he used questionnaires and secondary data from financial statement. The findings shown that there is an important relationship between bank performance (in terms of return on asset) and credit risk management (in terms of loan performance). Better credit risk management results in better bank performance. Thus, it is importance that banks practice credit risk management and safeguarding the assets of the banks and also protect the investors 'interests.

(Wood & Kellman, 2013) conducted a study on the risk management practices of six Barbadian banks. They highlighted that the bank managers in Barbados considered the adoption of risk management as an important and critical force for their banks` overall performance. They identified credit risk, operational risk, country risk, interest rate risk and market risks as the main types of risks in the selected Barbadian banks. They concluded that the risk management practices of the selected banks were efficient according to the changing business environment.

(Gebretatiyos, November, 2021) conducted a study on the risk management practices in Banking Sector in Ethiopia: The Case of Awash Bank S.C. The primary objective of the study was to examine the risk management practices of Awash Bank SC. According to the findings of the study, a relationship between controlling liquidity risk and risk management techniques has been identified. His study results bank managers should participate in risk management practices, which would decrease liquidity risk as well as other risks associated with the banking industry.

Majority of the researches used qualitative design and come up to the conclusion based on the respondent's argument. The researcher believes that a mere conducting of interview and take the response as a grant to determine the risk in the bank is not enough. Because of each risk have their indicating variables to be analyzed and interpreted. In addition to this, the reviewed studies used and focused by taking one single or two variables. It is known that proper management of overall risks that may commonly arise in bank has needed to investigate to ensure better performance and sound operation. Thus, the more the number of risk indicator/ variable included in the study the more will be the level of identifying the risk management practice of the bank under study.

2.3. Conceptual Framework

The Risk in bank is a cumulative effect of credit risk, liquidity risk and Market risk. These risks in turn come from different risk factors. The conceptual framework diagram presented bellow demonstrates the direct flow individual risk indicators to the total risk in the bank.

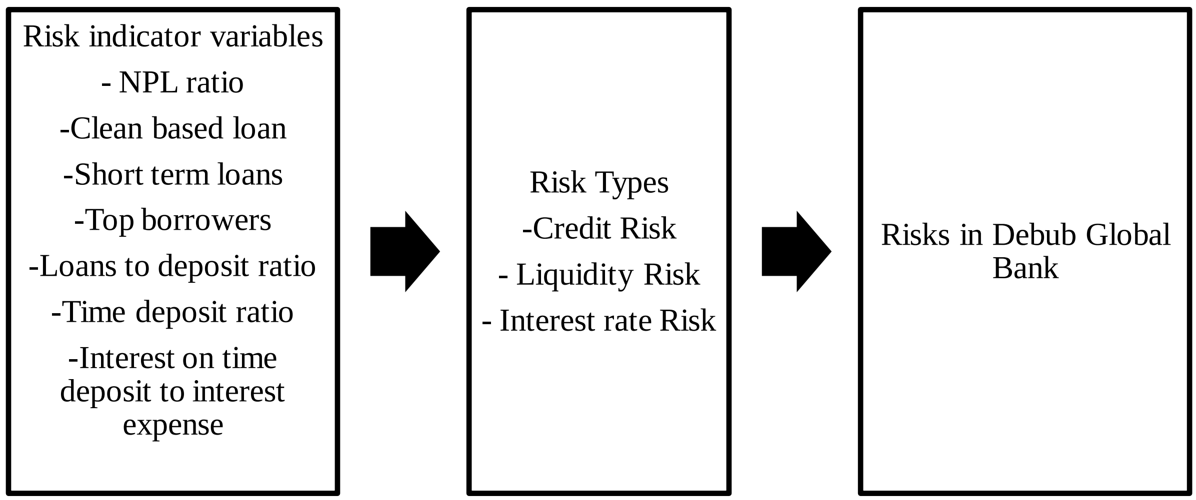

Figure 1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter deals with the research methodology which integrates the various techniques that are used for the study for the purpose of realizing the research objectives. Accordingly, in this chapter description of the area, Research design, population, sampling and sampling method, data collection tools, data analysis, reliability and validity and ethical consideration will be presented.

3.1. Description of Study Area

Debub Global Bank S.C. is one of the private commercial banks operating in Ethiopia. The bank established in 2012 with a subscribed and paid-up capital of Birr 266.9 Million and Birr 138.9 million, respectively. The research will be conducted in Addis Ababa, at the head office of the bank in the department of Risk and Compliance of the Debub Global S.C. The bank's head quarter is currently located in Addis Ababa around National Stadium inside the National tower buildings.

3.2. Research Design

The descriptive research design used in this study was chosen to satisfy the research objectives. Since the main goal of most descriptive research is to describe the condition of circumstances at the time of study, descriptive research enables the researcher to provide an accurate description of observation of phenomena.

3.3. Population

The target populations for the study were quarter's reports produced by risk and compliance department of Debub Global Bank S.C. The Banks hold data on Credit risk, liquidity risk, interest rate risk, foreign exchange risk, strategic risk, operational risks and compliance risks. Each risk type sub-classified by variables with several risk indicators expressed in ratios, percentage and narration.

3.4. Sampling and Sampling Methods

The researcher takes a five years data organized and reported in 20 quarters from March 2018 to December 2022. The period for the reports selected due to availability of a complete data in all the variables is analyzed in the research. In addition to this, variables expressed in the form of narration and not quantified are excluded from the research. Because it is unable to make a trend analysis for those data that are not put in numbers, ratio, or percentage forms.

For the reasons mentioned above among the banks data on risk; operational risk, compliance risk and strategic risks data are excluded because of their presentation in the narration form. While the other types of risks; Credit risk, liquidity risk, interest rate risk and foreign exchange risk have complete data and quantified to make a trend analysis. Thus, the variables are taken purposefully considering their convenience in the time series analysis.

3.5. Data Collection Tools

The data for the research input is collected from the bank's department quarter report. The secondary data is used which was collected from 20 quarters from March 2018 to December 2022.

3.6. Data Analysis

The data is collected from quarter report for the purpose of this study was registered using MS-Excel and recorded and analyzed using the Statistical Software for Data Sciences (STATA) software and the result is discussed by using statistical figures, ratios, tables and graphs for clarity of discussion. The data to be used in this research includes:

- **Credit risk:** Non-performing loans ratio, Short term loans, Clean based loans, and Top borrowers

- **Liquidity Risk:** loans to deposit ratio, and Time deposit
- **Interest rate risk:** interest on time deposit to interest expense
- **Foreign exchange risk**: Net revaluation ratio.

Non-Performing loans (NPL)

As per the National Bank of Ethiopia Asset classification and provisioning Directive SBB/69/2018 NPLs means loans and advances whose credit quality has deteriorated such that full collection of principal and/or interest in accordance with the contractual repayment terms of the loan or advance is in question. The Non-Performing loans of banks should not be above 5% of its total loans and advances.

Short Term loans (ST)

The National bank of Ethiopia Asset classification and provisioning Directive SBB/69/2018 defines Short term loans as loans and advances with repayment and maturity period of one year or less (NBE, 2018). Article 8 of the directive states that a bank's short-term loans and advances shall be at least 40% its total loans and advances.

Clean based loans (CL)

Loans and advances granted without pledging collateral; land, building, vehicle, fixed or current asset, share certificates and other tangible collaterals. The Debub Global Bank internal risk policy states that the risk tolerance limit for availing loan on clean basis is 10% (DGB, 2019).

Top borrowers (TB)

Top borrowers refer the top 20 borrowers of the bank at the end of each quarter. The bank's average number of borrowers in the 20 quarters under study was 2336. That means the 20 borrowers on average take 0.85% of the total borrowers size.

Loans to deposit ratio (LDR)

The loan to deposit ratio (LDR) measures the bank's liquidity and shows the ratio of the total loans and advances to total deposit of the bank at the time of the quarter end. The Debub Global Bank risk program allows the LDR not to be above 85%.

Time deposit (TD)

It is one of the deposit types in the bank's resource mobilization where deposits are made for a fixed term usually for six months and one year at higher interest rate. The bank gives a certificate of deposit to a depositor testimony for its deposit and it will not be withdrawn before the set date. The CD proportion against other type of deposit set to be 15% on the risk program of the bank.

Interest on time deposit to interest expense (ITDE)

This is the ratio of the interest expense on Time deposit to the total interest expense of the bank on various deposits the bank pays interest to the depositors. The interest expense due to time deposit share compared with the total interest paid in all interest bearing deposits.

3.7. Reliability and Validity

Debub Global Bank S.C. is a registered private commercial bank in Ethiopia supervised by the National bank of Ethiopia. The official data of the bank prepared by the Risk Management Department is used as input to conduct this study. Thus it is believed to be reliable and valid.

3.8. Ethical Considerations

The researcher keeps the confidentiality of the data to be collected from the Debub Global Bank and by any means will not use to harm the bank's interest. In addition to this, the data was used only for the academic purpose to the partial fulfillment of the requirements for the award of Master’s Degree in business administration.

CHAPTER FOUR

RESULT AND DISCUSSION

4.1. Data Analysis and Interpretation

Debub Global Bank is in operation since August 2012. The recent five consecutive years risk management of the bank for the period from March 2018 to December 2022 that shows half of the bank's history reviewed. The variable used to assess the risk management program of the bank including the Non-Performing-Loans ratio (NPLsR), Loans issued for short period with less than one year maturity (ST), Loans issued on clean basis without pledging a security (clean), The loans issued to top twenty borrowers of the bank (Top20B), Loans to Deposit ratio (LDR), Time deposit level (TD), and Interest on Time deposit against the interest expense (ITDIE).

The data on each variable was collected for 20 quarters from 2018 to 2022 and compared with the acceptable level set by the regulatory bodies, international acceptable level and the company's policy.

The subsequent tables presented the statistical summary of the collected data generated using the STATA are together with the graphical demonstration of the trend from the set threshold. It starts with the summary showing all variables basic statistical result followed by each variables detail statistical result.

Variable	Obs	Mean	Std. Dev.	Min	Max
NPLsR	20	.0318764	.0169653	.0043654	.0713809
ST	20	.3452046	.0401922	.2601684	.4103659
Clean	20	.17958	.1091817	.0006	.289
Top20B	20	.40876	.0330861	.357	.4809
LDR	20	.8812268	.0971281	.6763054	.9877345
TD	20	.2454915	.098619	.0989337	.3777545
ITDIE	20	.4329972	.1197548	.2747849	.5912173

Table 1: Statistical summary of the variables used in the study

The above table 1illustrates the statistical summary of the seven variables under 20 observations for five years or 20 quarters. The high spread out observed was on the result of the ITDIE, 0.119, which is the share of the interest paid to Time Depositor against the total interest expense trend. The second with high spread out from its mean was the result showing loans issued on clean basis without pledging collateral. Time deposit level, Loan to Depositors, Short Term loans size, top 20 borrowers and NPLs ratio took the descending order regarding their standard deviation level from their mean.

4.1.1. Non-Performing Loans

The Non-performing loans ratio is used to measure the credit risk of the banking system and to ensure that banks are not taking on too much risk. The National Bank of Ethiopia monitors the NPL ratio to ensure that it does not exceed the set limit of 5%. A high percentage of such loans show that banks have difficulty in collecting interest and principal on their credit. That may lead to lower profits for banks and possibly bank closures.

The 20 quarters observation of the Non-Performing-Loans ratio of the Debub Global Bank has a maximum value of 7.14 and a minimum value of 0.4%. The NPLs ratio has passed the set limit in two occurrences and was near to the limit in other two quarters. The table below shows the largest and smallest NPLs ratio observed in the past 20 quarters.

NPLsR

	Percentiles	Smallest		
1%	.0043654	.0043654		
5%	.0043833	.0044012		
10%	.0064097	.0084182	Obs	20
25%	.0216663	.0164412	Sum of Wgt.	20
50%	.0324276		Mean	.0318764
		Largest	Std. Dev.	.0169653
75%	.0397299	.048		
90%	.0526253	.0494831	Variance	.0002878
95%	.0635742	.0557674	Skewness	.2727182
99%	.0713809	.0713809	Kurtosis	2.996564

Table 2: NPLs Ratio summary

The comparison of the 20 quarters NPLs to the set limit NPLs ratio of 5% by the NBE shows the bank complies in many of the periods. The tenth to the 12^{th} quarters has demonstrated that the bank's lowest NPL ratio reflecting the healthiness of the bank's loan and the effort made to regularize the sick loans in the previous quarters.

The bank has met its internal limit of less than 2% NPLs size only in 5 instances, which is 25% of the time under the study. The last quarter the bank has met its internal limit was in the 14^{th} quarter. The other 13occurrences were between the bank's 2% limit and the NBE's 5% requirement and the remaining two were above even to the NBE's limit.

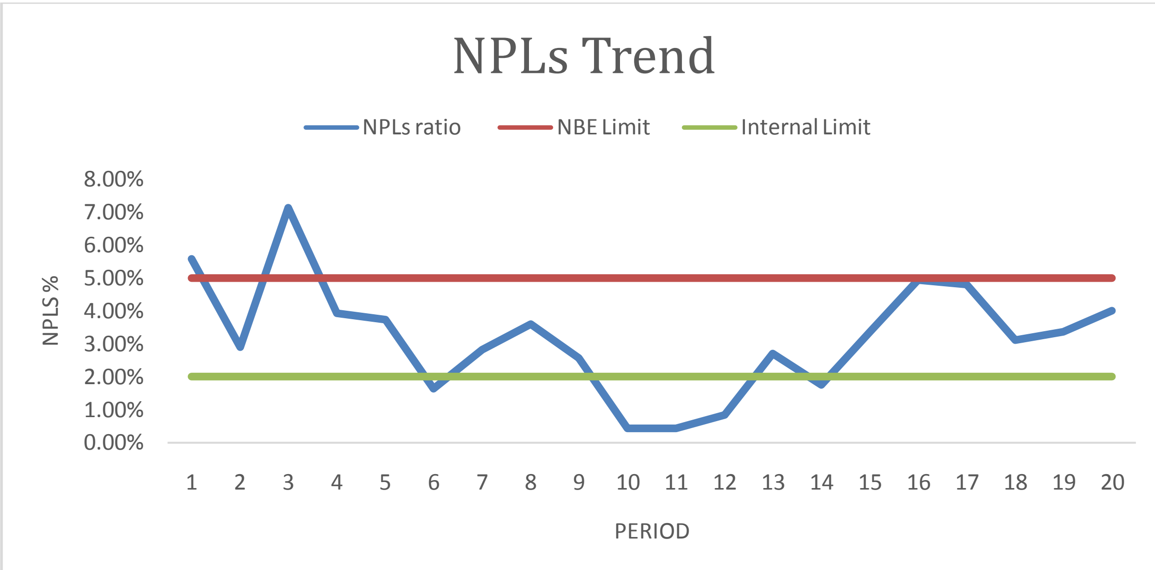

Figure 2: NPLs Trend against the NBE and Internal requirement

4.1.2. Short Term Loans

These loans are type of loans to be repaid within a year or less. The National Bank of Ethiopia requirement in connection with the portfolio composition of the bank states that the short term loans and advances shall be at least 40% of total loans and advances of the bank (NBE, Asset classification and provisioning directive No. SBB/69/2018, 2018). The Debub Global Bank has meet the requirement only one time in its five year operations under study, 41.03%.

ST

	Percentiles	Smallest		
1%	.2601684	.2601684		
5%	.2702487	.280329		
10%	.2832276	.2861262	Obs	20
25%	.3151366	.2993537	Sum of Wgt.	20
50%	.3596737		Mean	.3452046
		Largest	Std. Dev.	.0401922
75%	.3710956	.3749614		
90%	.3860043	.3848918	Variance	.0016154
95%	.3987414	.3871168	Skewness	-.6363027
99%	.4103659	.4103659	Kurtosis	2.459451

Table 3: Short Term loan summary

The 20 quarter's record of the bank's portfolio composition justifies that the Bank has more or less complied with the NBEs directives. The trend also shows starting from the 16th quarter the Short Term loans and advances proportion declines in line with the requirement of the regulation (NBE, Asset classification and provisioning directive No. SBB/69/2018, 2018).

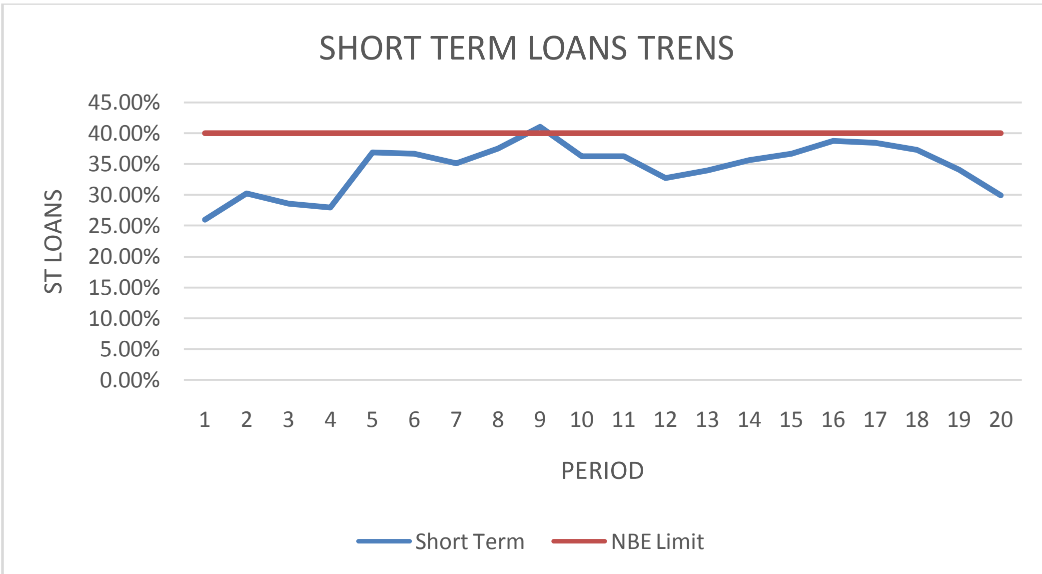

Figure 3: Short Term loan trend against the NBE requirement

4.1.3. Clean Based Loans

Banks request borrowers to bring certain form of collaterals to secure the requested loan. This is to minimize the risk in case of default of the borrower to repay the loan on time or and as per the agreed terms. In the cases, where the loans are given on clean basis, without pledging collateral there is less to push the borrower to fulfill the financial obligation. The Debub Global Bank has granted loans by pledging various properties. However the data under the study of the past 20 quarters reveals that the bank has availed loans on clean basis that on certain occasions reached nearly to one third of its total loan size, 28.9%.

Clean				
	Percentiles	Smallest		
1%	.0006	.0006		
5%	.0008	.001		
10%	.001	.001	Obs	20
25%	.09275	.0015	Sum of Wgt.	20
50%	.224		Mean	.17958
		Largest	Std. Dev.	.1091817
75%	.2565	.271		
90%	.277	.272	Variance	.0119207
95%	.2855	.282	Skewness	-.9433439
99%	.289	.289	Kurtosis	2.177343

Table 4: Loans given on clean basis

The loans given on clean basis in the past five years as per the 20 quarters trend as compared to the bank's internal risk tolerance limit of 10% shows that the 5th quarter was the last that the bank compiles with the set limit. After the fifth quarter the bank never back to its risk tolerance limit rather the gap widen by far. The lowest clean loans percentile recorded after the fifth quarter was on the twelve quarter, where the bank could lower its clean based loan size to 18.4% of its total loan. This is also above the risk tolerance limit set by the bank.

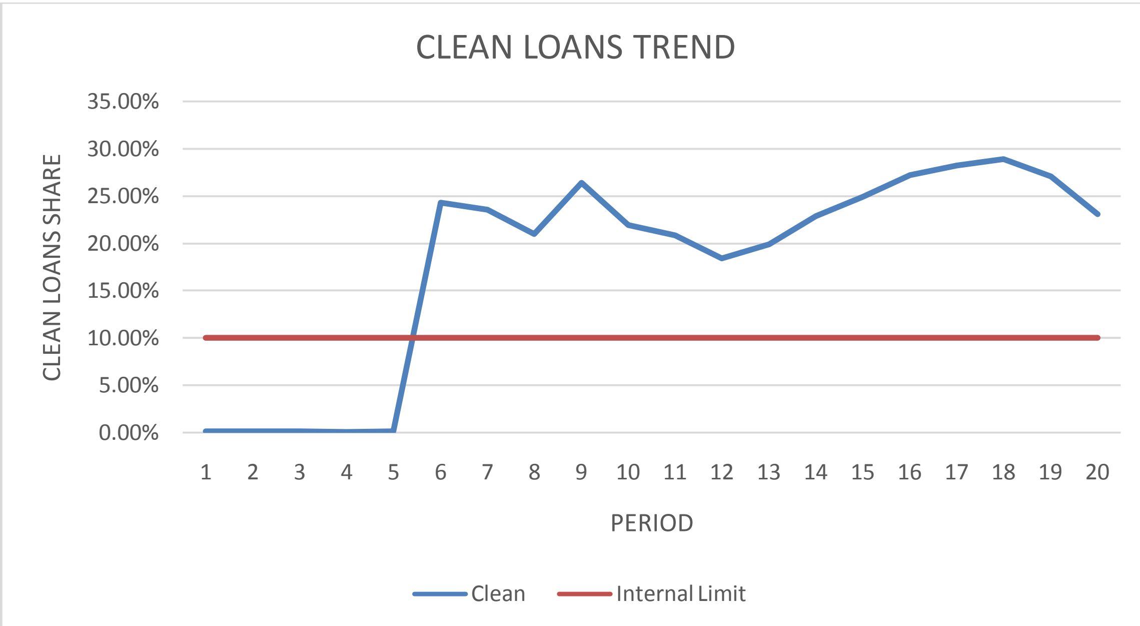

Figure 4: Loans given on clean bases against the bank's risk tolerance limit

4.1.4. Top Borrowers

The mean of the loan and advances gien to the top borrowers of the bank shows that 40.88% of the loan was advanced to 20 borrowers of the bank. Credit risk concentration in asset portfolios has been one of the major causes of bank distress in the past (BIS, 2006).

Top20B

	Percentiles	Smallest		
1%	.357	.357		
5%	.362	.367		
10%	.37	.373	Obs	20
25%	.3861	.378	Sum of Wgt.	20
50%	.4081		Mean	.40876
		Largest	Std. Dev.	.0330861
75%	.4239	.439		
90%	.4615	.455	Variance	.0010947
95%	.47445	.468	Skewness	.5922889
99%	.4809	.4809	Kurtosis	2.700885

Table 5: Top 20 borrowers

Diversification of risk is a key precept in banking. A significant proportion of major bank failures have been due to credit risk concentration of one kind or another (BCBS, 1990). The top 20 borrowers under study have taken an average of 0.01% of the total Debub Global Bank's borrowers in the 20 quarters. However their loan size extended and once reached to nearly half of the total bank's loan, 48.09%. The figure below shows that these top 20 borrowers loan size increases through time. This shows there is a concentrations in the bank's credit portfolio that might entails a credit risk.

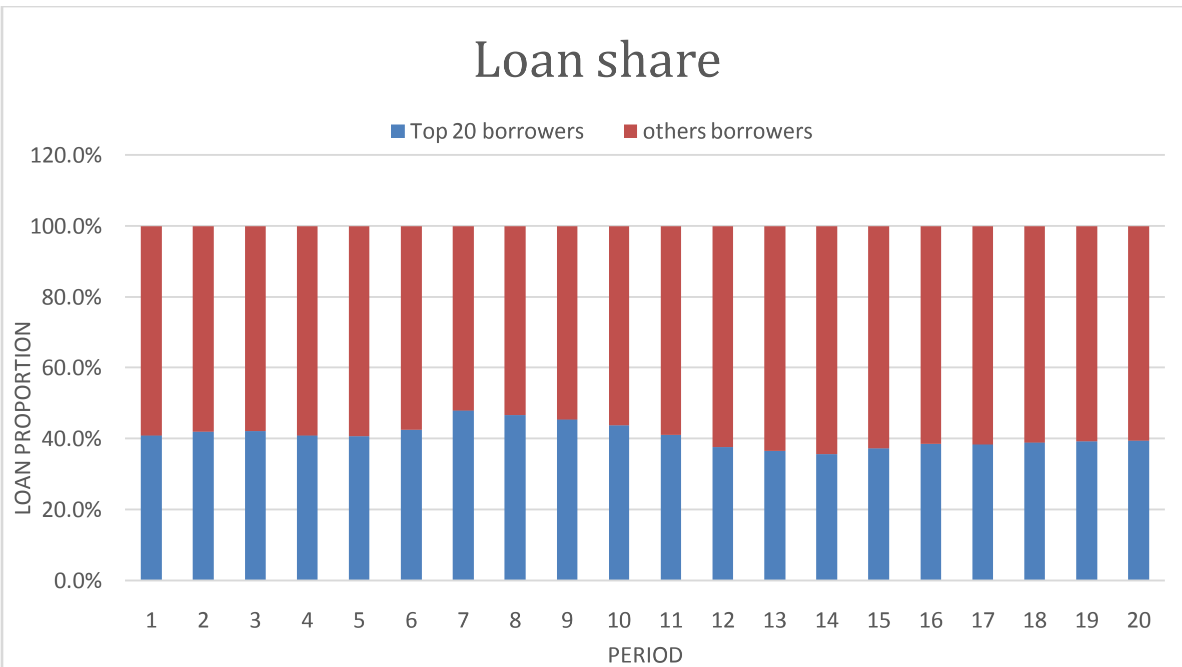

Figure 5: Top 20 borrowers and other borrower's loan

4.1.5. Loan to Deposit Ratio

The loan to deposit ratio (LDR) shows the total loan availed by the bank against total deposit of the bankfor the same period. It is used to assess a bank's liquidity. The Debub Global Bank has experienced an LDR of 98.77 that implies the bank starts to lend from its capital because there is an NBE requirement of reserve of 7%, (NBE, Reserve requirements Directive no. SBB/84/2022, 2022). The mean of the 20 quarter LDR result was 88.12% which is above the internal limit of 85%.

LDR

	Percentiles	Smallest		
1%	.6763054	.6763054		
5%	.6905772	.7048489		
10%	.717899	.730949	Obs	20
25%	.8037776	.7893873	Sum of Wgt.	20
50%	.914726		Mean	.8812268
		Largest	Std. Dev.	.0971281
75%	.9603688	.9714351		
90%	.981295	.9783071	Variance	.0094339
95%	.9860088	.984283	Skewness	-.8080245
99%	.9877345	.9877345	Kurtosis	2.4201

Table 6: Loans to deposit ratio

The Debub Global Bank could maintain its internal limit only in six instances and stayed above its LDR limit in all other 12 quarters. The bank was within its LDR limit from 2nd to 7th quarter. After the 7th quarter the bank continued to be above the internal LDR limit.

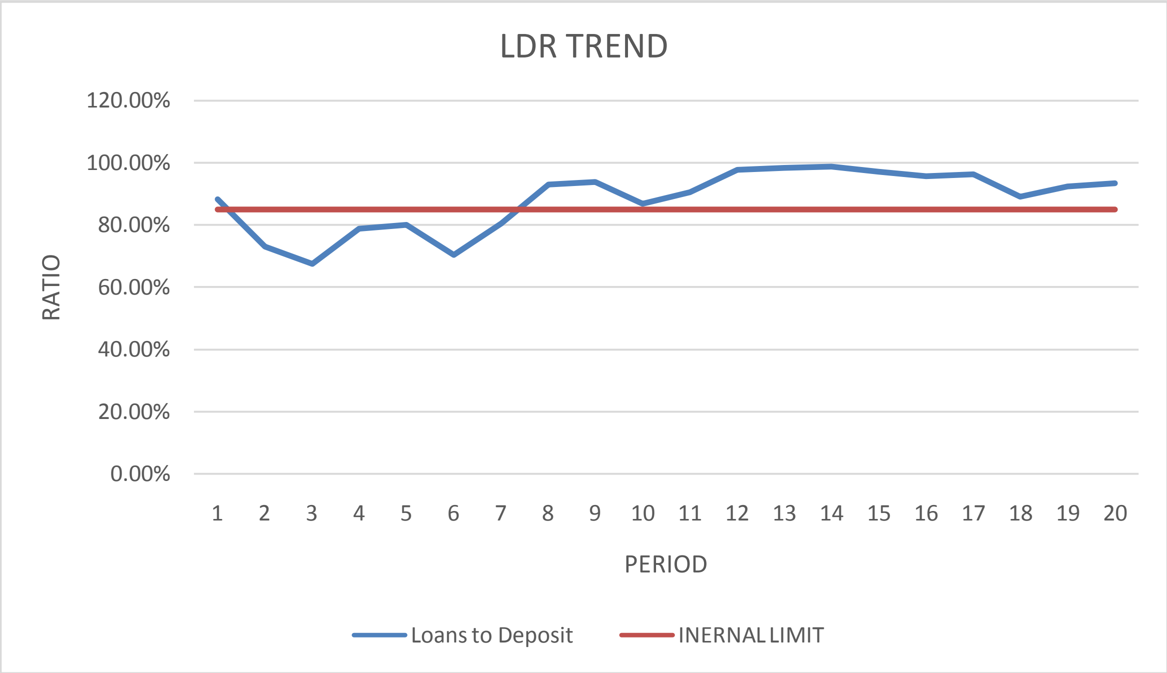

Figure 6: Loan to Deposit Ratio

4.1.6. Time Deposit

It is one of the saving accounts offered by the Debub Global Bank. It is different from other types of deposit item due to the interest rate the borrowers demands to be paid. The interest rate to time deposit, commonly known as Certificate of Deposit – CD, is higher than any other deposit types; current or cheque account, and various types of saving account. The mean of the total time deposit in the past 20 quarters as shown in the table below is 24.55% of the total deposits. Thus, on average the Time Deposit grabs one-fourth of the total deposit of the bank.

TD

	Percentiles	Smallest		
1%	.0989337	.0989337		
5%	.111598	.1242623		
10%	.1244781	.1246939	Obs	20
25%	.141075	.1327231	Sum of Wgt.	20
50%	.2560595		Mean	.2454915
		Largest	Std. Dev.	.098619
75%	.3398711	.3435809		
90%	.3517214	.3492175	Variance	.0097257
95%	.3659899	.3542253	Skewness	-.1199384
99%	.3777545	.3777545	Kurtosis	1.328677

Table 7: Time deposit ratios

The internal limit of the Debub Global Bank regarding Time Deposit is 15% of the total deposit amount mobilized by the bank. Despite the internal limit set by the bank. The trend of the Time Deposit shows that the bank could remain with its internal limit of 15% was only in 6 instances of the period under study. Particularly, starting from the 8th quarter and onwards the bank's time deposit trend shows a continuous increase reaching 37.78% of the deposit share on the 17th quarter.

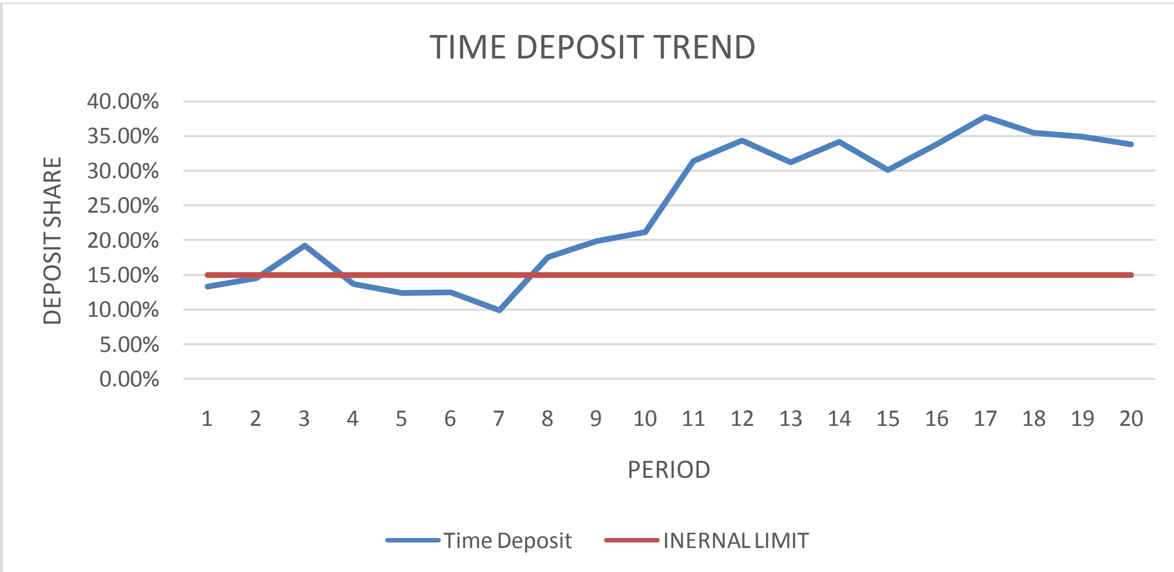

Figure 7: Time Deposit Trend

4.1.7. Interest on Time Deposit to Interest Expense

The interest expense trend of the bank as shown in the 20 quarters reveals that the Time Deposit interest payment has taken an average of 43.3% of the total interest expenses. Since Time deposit is mobilized by giving high interest rate so does the interest expense amount. The largest portion recorded 59.12%.

ITDIE

	Percentiles	Smallest		
1%	.2747849	.2747849		
5%	.2779419	.2810989		
10%	.2867435	.2923882	Obs	20
25%	.3204557	.3155448	Sum of Wgt.	20
50%	.4408686		Mean	.4329972
		Largest	Std. Dev.	.1197548
75%	.5416051	.5509573		
90%	.5689237	.5509885	Variance	.0143412
95%	.5890381	.5868589	Skewness	-.025395
99%	.5912173	.5912173	Kurtosis	1.208644

Table 8: Interest on Time Deposit to Interest Expense

The trend line of the interest expense on time deposit shows an increasing trend that surpasses the total interest expense to all other types of deposits mobilized by the bank. Starting from the eleventh quarter and onwards more than half of the bank's interest expense was emanated from interest expense on time deposit.

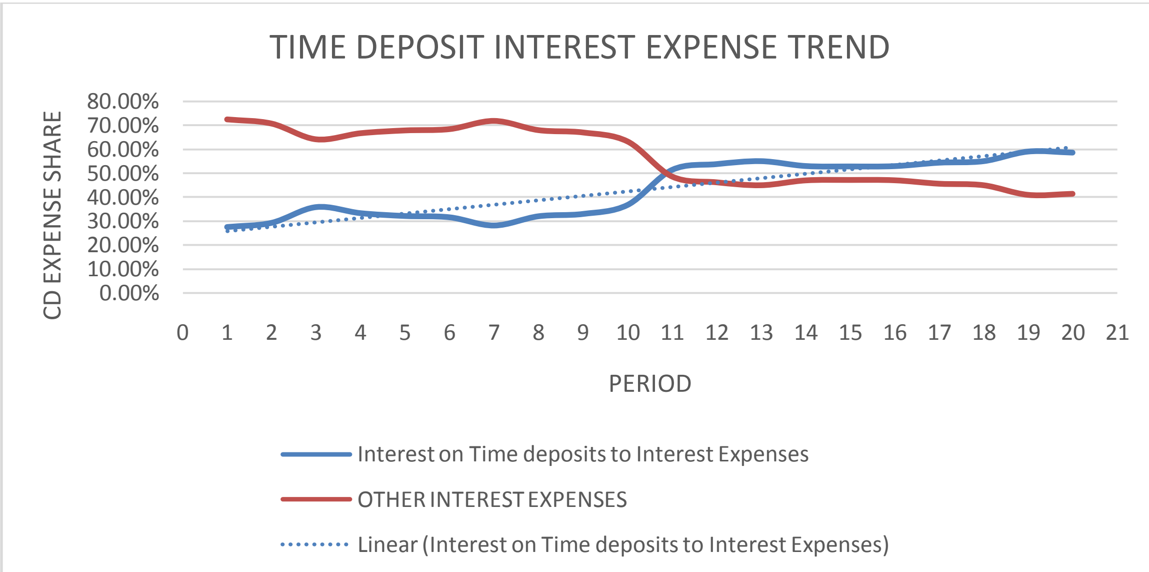

Figure 8: Time Deposit Interest Expense Trend

CHAPTER FIVE

FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Major Findings

The study used 20 consecutive quarters' data to make an Assessment on the Risk Management Practices of Debub Global Bank S.C. For this purpose seven variables are selected to demonstrate the risk from loan, liquidity, borrowers' size, and income perspectives. The major findings in line with each variables result is presented as follows.

The bank was expected to operate in line with the regulation set by the NBE and by keeping its internal policy and procedures. The bank has no any record that shows zero violation of either the internal or NBE requirement in whole variables reviewed in this study. Indeed it has shown improvement in reducing the NBE requirement violation, only in the Non-Performing loans requirements. However, it has stayed working out of its internal risk program in all variables that the bank has set a limit.

The internal non-performing loan limit set bank the bank violated 7 quarters bank from the end of this study. That means for the past nearly one year the bank stayed out of its internal NPL requirement or 2%. The bank, of course, maintained the working under the NBE NPLs requirement of 5%.

Regarding the loans issued under Short term loans schedule. The bank stayed within the NBE requirement of allocating 40% of the total loans and advances to short maturing loans, once in the 20 quarters under study. In all other quarters, the bank violated this requirement. The ratio remained below 40% meaning the bank keep availing loans in the medium and long term despite the requirements. The trend shows the bank stays away from the requirement and the proportion of short term loan is in continuous decline that is against the NBE requirement.

The risk program of the banks states that the bank could avail loans and advances on clean basis up to 10% of the total loans and advances. The study shows that the loans and advances availed on clean basis were below 1% in the first 5 quarters and were within the risk program requirement of the bank. Starting from the 6th quarters on wards the bank's loan availed on clean basis roar to the maximum 28.9% in the 18th quarter. This implies nearly one-third of the bank's loans are at risk in case of default. This is violating the bank's internal policy and worsens the possibility of credit risk.

The loan availed to top 20 borrowers of the bank in the study period stayed on an average of 40.9% of the total loans and advances given to all other borrowers of the bank. On the other hand the borrower's number share shows these 20 borrowers account only 1.01% of the total borrowers' size of the bank. This entails concentration risk in case of a default by these 20 or half of them.

The loan to deposit ratio result shows the bank is out of the limit required on its internal limit, 85%. The bank is working away from its LDR limit from 7th quarter of the study period onwards. The bank has been availing loan even above 98% of its deposits. Taking in to consideration the NBE reserve requirement the Debub Global Bank erodes its capital and lend it. This might put the bank in liquidity problem.

The bank's time deposit actual size is almost two times away from the internal requirement set in the risk program of the bank, 15%. The past ten consecutive data in the period under study justifies that the time deposit amount has been between 30% and 34.9%. The great negotiation power of the time depositors and change of mind to withdraw the deposit will lead the bank to a great liquidity constraint. Because time deposit has maturity period risking the bank since the depositors may approach the bank with new deposit rate to continue otherwise to withdraw.

On the other hand the high size of time deposit amount with high interest rate leads the bank to pay high interest expenses. The trend of interest expense payment by the bank to time deposit surpasses the total interest expense paid to all other deposit interest expenses. The gap even starts to be wider and wider. The trend line for the time deposit interest expense shows it keeps increasing. This of course has impact on the profits of the bank.

5.2 Conclusions

- The bank was expected to operate in line with the regulation set by the NBE and by keeping its internal policy and procedures. The bank has no any record that shows zero violation of either the internal or NBE requirement in whole variables reviewed in this study. Indeed it has shown improvement in reducing the NBE requirement violation, only in the Non-Performing loans requirements. However, it has stayed working out of its internal risk program in all variables that the bank has set a limit.
- The bank keeps away from the NBE requirement in connection with short term loans and advances proportion from the total loans. The loans are accumulated in the medium and long term loans. That means the bank has less of loans advanced for working capital purpose that are expected to mature in a year or less than a year period. This affects the liquidity position of the bank.
- The bank is not working within the internal risk program of the bank in many areas. The four variables out of the seven under study shows that the bank is not maintaining the set limit it has put in its risk program regarding NPLs ratio, Loans to be availed on clean basis, Loan to deposit ratio, and Time deposit proportion.

The trend as well as current positions of these risk indicator variables shows the bank is still has a gap to work under its set limit.

- The loan availed to top 20 borrowers of the bank in the study period stayed on an average of 40.9% of the total loans and advances given to all other borrowers of the bank. On the other hand the borrower's number share shows these 20 borrowers account only 1.01% of the total borrowers' size of the bank. In case of default, this brings a serious credit risk on the banks and of course the income and profit of the bank.
- The bank's deposit distribution trend shows a complete diversion from the internal deposit proportion requirements of the bank. Relying on time deposit costs the bank a higher interest expense since time deposit has a higher interest rate than any other types of deposit rates. This clearly revealed in the proportion of the interest expense due to time deposit that surpasses half of the total interest expense incurred by the bank. This seriously affects the bank's profitability.

5.3 Recommendations

To improve the risk management practice in the bank the following recommendations are forwarded by the researcher.

- The bank should work towards maintaining the NBE requirements of maintaining the Short term loan requirement of 40% by granting short maturing loans and gradually decreasing the medium and long term loans proportion.
- The bank should consider the current internal and external situations that affected the bank in particular and the industry in general and update its risk program to align with the actual or practical conditions the bank is facing. Thus to avoid the ever increasing gap between the actual and programmed limit set for each risk indicators.

- The bank should also work in widening its resource mobilization to gradually shift from time deposit that demands high interest rate to other forms of deposit by arranging a continuous resource mobilization campaign and by designing other forms of deposit mobilization techniques.
- The board needs to provide oversight and direction to senior management by setting the organization's risk appetite. The senior management in turn should give a great focus and update periodically the risk program of the bank as provided by the Risk and compliance department considering the external and internal conditions in the banking industry, the nation and worldwide events.

REFERENCE

Ahmed, M. (December, 2018). Assessment and evaluation of Credit Risk Management in United Bank.

Amsale, C. Y. (June,2019). Risk Management Practice in the Case of Commercial Bank of Ethiopia

Bank of England. (2020, May 19). *Bank of England*. Retrieved from Bank of England: https://www.bankofengland.co.uk/explainers/what-risks-do-banks-take

Bank of Kenya. (2013, January). Risk mangement Guide Line.

Bank of Tanzania. (2010, August). Risk Management Guidelines for Banks and Financial Institutions ,2010. Dar es Salaam.

Bank of Tanzania, Directorate of Banking Supervision . (2010, August). RISK MANAGEMENT GUIDELINES FOR BANKS AND FINANCIAL INSTITUTIONS, 2010. Dar es Salaam .

BCBS. (1990). Large credit exposures. *Basle Committee on Banking Supervision, sixth International Conference.* Frankfurt: BIS.

Bessis, J. (2015). *Risk management in banking.* John Wiley & Sons, Ltd.

BIS. (2012). Operationalising the selection and application of macroprudential instruments. *CGFS Papers 48* . Bank for international settlements.

BIS. (2006). Studies on credit risk concentration. In *BIS Working paper no. 15.* Bank for International Settlements.

Choudhury, I. R. (2020, September 24). Risk Assessment in Banks. Iraq: Consultant at Trade Bank of Iraq.

Daniel, A. F. (July, 2017). ASSESSMENT ON THE PRACTICES OF CREDIT RISK MANAGEMENT AND ITS EFFECT ON THE FINANCIAL PERFORMANCE OF BANKS IN ETHIOPIA .

Debub Global Bank Sc. (2021/22). *Annual Report.* Addis Ababa: Debub Global Bank Sc.

Dei, E., Ofosu-Hene, & Amoh, P. (2016). RISK MANAGEMENT AND PERFORMANCE. *European Journal of Business, Science and Technology, Volume 2 Issue 2* , ISSN 2336-6494.

Debub global Bank . (2019, October). Comprehensive risk management program. Addis Ababa.

Directorate of Banking, S. (2010). *Risk management guidlines for banks and financial institutions.* Dar es Salaam.

Frank J. Fabozzi, F. G. (2002). The Legacy of Modern Portfolio Theory. *The Journal of Investing* , 7-22.

Galyna Chornous, G. U. (2013).Risk Management in Banks new approaches toRisk Assessment and Information Support. Ekonomika , 120-132.

Gebretatiyos, E. (November, 2021). Risk Management Practices in Banking Sector in Ethiopia:The case of Awash Bank S.c.

Greuning, H. v., & Bratanovic, S. B. (2020). *Analyzing Banking Risk, A Framework for Assessing Corporate Governance and Risk Management.* Washington: International Bank for Reconstruction and Development / The World Bank.

Gündüz, V. (2020). Risk Management in Banking Sector. In B. C. University, *Management & Strategy* (pp. 121-135). Artikel Akademi.

Gündüz, V. (October, 2020). Risk Management in Banking Sector. pp: (121-135).

Hafeth, A.-A. J. (2019). RISK DEFINITION IN BANKS. *Kazan Federal University, Institute of Management, Economics and Finance, kazan* , 79-82.

IRGC. (2023). Risk Governance Framework.

ISO. (2009). *ISO 31000:2009 Risk management — Principles and guidelines.* International organization for standardization.

Kebede, S. Y. (June, 2020). ASSESSMENT OF RISK MANAGEMENT PRACTICE ON DEBUB GLOBAL BANK S.C.

Kollie, P. Z. (February, 2022). Risk Management Practices in Abay Bank, Addis Ababa,Ethiopia.

Lidiya, A. (May,2019). Risk Management Practice in Commercial Bank of Ethiopia (CBE).

NBE. (2018). Asset classification and provisioning directive No. SBB/69/2018.

NBE. (2010, May). *Bank Risk Management Guidelines (Revised)*. Retrieved from National Bank of Ethiopia: https://nbebank.com/wp-content/uploads/2019/04/Rm-Guideline-revised-1.pdf

NBE. (2009, December). *Banking Industry Risk Management Survey Report*. Retrieved from National Bank of Ethiopia: https://nbebank.com/wp-content/uploads/2019/04/SurveyReport-revised.pdf

NBE. (2014). Liquid Assets directive No.SBB/57/2014.

NBE. (2022). Reserve requirements Directive no. SBB/84/2022.

OCC. (2023, January 23). *The Office of the Comptroller of the Currency (OCC)*. Retrieved from The Office of the Comptroller of the Currency (OCC): https://www.occ.gov/about/who-we-are/index-who-we-are.html

Oxford University Press. (2023, 1 25). Oxford Learner's dictionaries.

Sharma, S., Chami, R., & Khan, M. S. (2003). Emerging issue in banking Regulation. *IMF Working Papers Volume 2003: Issue 101* , 1-25.

Tursoy, T. (2018). Risk management process in banking. Near East University, Cyprus. Retrieved May 2018

Tursoy, T. (2018). Risk management process in banking.

WB. (2020). *Doing business 2020 comparing business regulation in 190 countries.* Washington, DC : International Bank for Reconstruction and Development / The World Bank.

Zervos, R. L. (1988). Stock Markets, Banks, and Economic Growth. *The American Economic Review, Vol. 88, No. 3* , 537-558.

APPENDIXES

ANNEXA: Top 20 borrowers proportion against the total number of borrowers

Quarter	NO. OF CUSTOMER	Top 20 borrowers proportion
Mar-18	1,154	1.73%
Jun-18	1,146	1.75%
Sep-18	1,161	1.72%
Dec-18	1,345	1.49%
Mar-19	1,439	1.39%
Jun-19	1,534	1.30%
Sep-19	1,643	1.22%
Dec-19	1,751	1.14%
Mar-20	1,929	1.04%
Jun-20	2,298	0.87%
Sep-20	2,491	0.80%
Dec-20	2,627	0.76%
Mar-21	2,836	0.71%
Jun-21	3,042	0.66%
Sep-21	2,868	0.70%
Dec-21	3,234	0.62%
Mar-22	3,378	0.59%
Jun-22	3,430	0.58%
Sep-22	3,748	0.53%
Dec-22	3,671	0.54%

ANNEX B: Top 20 borrowers by loan amount and proportion

Quarter	Total Loans and Advances	Top 20 borrowers share		Others	
		%	Amount	%	Amount
Mar-18	1,542.21	40.9%	630.61	59.11%	911.60
Jun-18	1,584.12	42.1%	667.23	57.88%	916.89
Sep-18	1,709.70	42.3%	722.52	57.74%	987.18
Dec-18	2,038.64	40.9%	833.60	59.11%	1,205.04
Mar-19	2,445.33	40.7%	995.98	59.27%	1,449.35
Jun-19	2,469.41	42.5%	1,049.99	57.48%	1,419.42
Sep-19	2,821.25	48.1%	1,356.74	51.91%	1,464.51
Dec-19	3,314.18	46.8%	1,551.04	53.20%	1,763.14
Mar-20	3,788.26	45.5%	1,723.66	54.50%	2,064.60
Jun-20	4,453.34	43.9%	1,955.02	56.10%	2,498.32
Sep-20	5,879.09	41.1%	2,416.31	58.90%	3,462.78
Dec-20	6,850.64	37.8%	2,589.54	62.20%	4,261.10
Mar-21	7,600.43	36.7%	2,789.36	63.30%	4,811.07
Jun-21	8,088.91	35.7%	2,887.74	64.30%	5,201.17
Sep-21	8,079.40	37.3%	3,013.62	62.70%	5,065.78
Dec-21	8,501.28	38.7%	3,290.00	61.30%	5,211.28
Mar-22	8,687.53	38.5%	3,346.44	61.48%	5,341.09
Jun-22	8,966.95	39.0%	3,497.11	61.00%	5,469.84
Sep-22	10,153.79	39.4%	4,000.59	60.60%	6,153.20
Dec-22	11,723.75	39.6%	4,642.61	60.40%	7,081.15

ANNEX C: NPLs ratio with internal and regulatory limit			
Quarter	**NPLs ratio**	**NBE Limit**	**Internal Limit**
Mar-18	5.58%	5.00%	2.0%
Jun-18	2.91%	5.00%	2.0%
Sep-18	7.14%	5.00%	2.0%
Dec-18	3.94%	5.00%	2.0%
Mar-19	3.75%	5.00%	2.0%
Jun-19	1.64%	5.00%	2.0%
Sep-19	2.82%	5.00%	2.0%
Dec-19	3.61%	5.00%	2.0%
Mar-20	2.58%	5.00%	2.0%
Jun-20	0.44%	5.00%	2.0%
Sep-20	0.44%	5.00%	2.0%
Dec-20	0.84%	5.00%	2.0%
Mar-21	2.70%	5.00%	2.0%
Jun-21	1.75%	5.00%	2.0%
Sep-21	3.36%	5.00%	2.0%
Dec-21	4.95%	5.00%	2.0%
Mar-22	4.80%	5.00%	2.0%
Jun-22	3.12%	5.00%	2.0%
Sep-22	3.38%	5.00%	2.0%
Dec-22	4.01%	5.00%	2.0%

ANNEX D: short term loan % with NBE limit		
Quarter	**Short Term**	**NBE Limit**
Mar-18	26.02%	40.00%
Jun-18	30.29%	40.00%
Sep-18	28.6%	40.00%
Dec-18	28.0%	40.00%
Mar-19	36.9%	40.00%
Jun-19	36.7%	40.00%
Sep-19	35.1%	40.00%
Dec-19	37.5%	40.00%
Mar-20	41.0%	40.00%
Jun-20	36.3%	40.00%
Sep-20	36.3%	40.00%
Dec-20	32.7%	40.00%
Mar-21	34.0%	40.00%
Jun-21	35.7%	40.00%
Sep-21	36.6%	40.00%
Dec-21	38.7%	40.00%
Mar-22	38.5%	40.00%
Jun-22	37.3%	40.00%
Sep-22	34.1%	40.00%
Dec-22	29.9%	40.00%

ANNEX E: clean loan with internal limit		
Quarter	**Clean**	**Internal Limit**
Mar-18	0.15%	10%
Jun-18	0.15%	10%
Sep-18	0.1%	10%
Dec-18	0.06%	10%
Mar-19	0.1%	10%
Jun-19	24.3%	10%
Sep-19	23.6%	10%
Dec-19	21.0%	10%
Mar-20	26.4%	10%
Jun-20	21.9%	10%
Sep-20	20.9%	10%
Dec-20	18.4%	10%
Mar-21	19.9%	10%
Jun-21	22.9%	10%
Sep-21	24.9%	10%
Dec-21	27.2%	10%
Mar-22	28.2%	10%
Jun-22	28.9%	10%
Sep-22	27.1%	10%
Dec-22	23.1%	10%

ANNEX F: Top 20 borrowers and other borrowers			
Quarter	**Top 20 borrowers**	**borrower size proportion**	**others borrowers**
Mar-18	**40.9%**	**1.73%**	59.11%
Jun-18	**42.1%**	**1.75%**	57.88%
Sep-18	**42.3%**	**1.72%**	57.74%
Dec-18	**40.9%**	**1.49%**	59.11%
Mar-19	**40.7%**	**1.39%**	59.27%
Jun-19	**42.5%**	**1.30%**	57.48%
Sep-19	**48.1%**	**1.22%**	51.91%
Dec-19	**46.8%**	**1.14%**	53.20%
Mar-20	**45.5%**	**1.04%**	54.50%
Jun-20	**43.9%**	**0.87%**	56.10%
Sep-20	**41.1%**	**0.80%**	58.90%
Dec-20	**37.8%**	**0.76%**	62.20%
Mar-21	**36.7%**	**0.71%**	63.30%
Jun-21	**35.7%**	**0.66%**	64.30%
Sep-21	**37.3%**	**0.70%**	62.70%
Dec-21	**38.7%**	**0.62%**	61.30%
Mar-22	**38.5%**	**0.59%**	61.48%
Jun-22	**39.0%**	**0.58%**	61.00%
Sep-22	**39.4%**	**0.53%**	60.60%
Dec-22	**39.6%**	**0.54%**	60.40%

ANNEX G: Loans to deposit ratio with internal limit		
Quarter	Loans to Deposit	Internal limit
Mar-18	88.24%	85.00%
Jun-18	73.09%	85.00%
Sep-18	67.63%	85.00%
Dec-18	78.94%	85.00%
Mar-19	80.12%	85.00%
Jun-19	70.48%	85.00%
Sep-19	80.63%	85.00%
Dec-19	92.99%	85.00%
Mar-20	93.85%	85.00%
Jun-20	86.82%	85.00%
Sep-20	90.61%	85.00%
Dec-20	97.83%	85.00%
Mar-21	98.43%	85.00%
Jun-21	98.77%	85.00%
Sep-21	97.14%	85.00%
Dec-21	95.78%	85.00%
Mar-22	96.30%	85.00%
Jun-22	89.10%	85.00%
Sep-22	92.34%	85.00%
Dec-22	93.35%	85.00%

ANNEX H: Time deposit/certificate of deposit		
Quarter	Time Deposit	Internal limit
Mar-18	13.27%	15%
Jun-18	14.51%	15%
Sep-18	19.19%	15%
Dec-18	13.70%	15%
Mar-19	12.43%	15%
Jun-19	12.47%	15%
Sep-19	9.89%	15%
Dec-19	17.52%	15%
Mar-20	19.88%	15%
Jun-20	21.14%	15%
Sep-20	31.39%	15%
Dec-20	34.36%	15%
Mar-21	31.26%	15%
Jun-21	34.15%	15%
Sep-21	30.08%	15%
Dec-21	33.80%	15%
Mar-22	37.78%	15%
Jun-22	35.42%	15%
Sep-22	34.92%	15%
Dec-22	33.82%	15%

ANNEX I: Interest on Time deposits to Interest Expenses and Other Interest Expenses		
Quarter	Interest on Time deposits to Interest Expenses	Other Interest Expenses
Mar-18	27.48%	72.52%
Jun-18	29.24%	70.76%
Sep-18	35.83%	64.17%
Dec-18	33.28%	66.72%
Mar-19	32.10%	67.90%
Jun-19	31.55%	68.45%
Sep-19	28.11%	71.89%
Dec-19	31.99%	68.01%
Mar-20	32.97%	67.03%
Jun-20	36.74%	63.26%
Sep-20	51.43%	48.57%
Dec-20	53.86%	46.14%
Mar-21	55.10%	44.90%
Jun-21	53.05%	46.95%
Sep-21	52.88%	47.12%
Dec-21	53.01%	46.99%
Mar-22	54.46%	45.54%
Jun-22	55.10%	44.90%
Sep-22	59.12%	40.88%
Dec-22	58.69%	41.31%