

**LIQUIDITY AND PROFITABILITY ANALYSIS OF
NEPALESE DEVELOPMENT BANK: A COMPARATIVE
STUDY OF MUKTINATH BIKASH BANK LIMITED AND
GARIMA BIKASH BANK LIMITED**

By:

Bikesh Bajracharya

People's Campus

Campus Roll No.: 1/072

T.U. Reg. No.: 7-2-761-7-2012

Symbol No.: 2710003

A Thesis Submitted To:

Office of the Dean

Faculty of Management

Tribhuvan University

*In partial fulfillment of the requirement for the Degree of
Master of Business Studies (M.B.S)*

Kathmandu, Nepal

February, 2021

RECOMMENDATION

This is to certify that the thesis

Submitted by:

Bikesh Bajracharya

Entitled

Liquidity and Profitability Analysis of Nepalese Development Bank:

A Comparative study of Muktinath Bikash Bank Limited and

Garima Bikash Bank Limited

has been prepared as approved by this campus/department in the prescribed format of the faculty of management. This thesis is forwarded for examination.

Signature:..... Signature:..... Signature:.....

..

..

..

Supervisor's Name:

Supervisor's Name:

Campus Chief/HOD:

Date:

VIVA-VOCE SHEET

We have conducted the viva-voce examination of the thesis

Submitted by

Bikesh Bajracharya

Entitled

Liquidity and Profitability Analysis of Nepalese Development Bank:

A Comparative study of Muktinath Bikash Bank Limited and

Garima Bikash Bank Limited

And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirements for the Degree of Master in Business Studies (M.B.S.)

Viva-Voce Committee

Head, Research Department

Member, Thesis Supervisor

Member, External Expert

Date:

DECLARATION

I hereby declare that the work reported in this thesis entitled **Liquidity and Profitability Analysis of Nepalese Development Bank: A Comparative study of Muktinath Bikash Bank Limited and Garima Bikash Bank Limited** submitted to the Office of Dean, Faculty of Management, Tribhuvan University, is my Degree of Master of Business Study (MBS) under the supervision of Rajan Bilas Bajracharya, Campus Chief of Peoples Campus, Faculty of Management, Tribhuvan University.

.....

Researcher

Bikesh Bajracharya

ACKNOWLEDGEMENT

I wish to express my deep gratitude to my honorable teachers Mr. Rajan Bilas Bajracharya and Mr. Arhan B Sthapit for their constant encouragement, guidance, valuable supervision and meticulous care from time to time. This thesis work would never have been completed without their guidance that helped me a lot to get towards a clear insight. I express my deep sincere and special thanks towards them.

Lastly, I am very much thankful to my family and friends for the encouragement and support they have shown and given for the completion of this study.

.....

Researcher

Bikesh Bajracharya

Table of Contents

Recommendation	
Viva-Voce Sheet	
Declaration	
Acknowledgement	
Table of Contents	
List of Tables	
List of Figures	
Abbreviations	
Chapter One	
Introduction	
Background of the Study	1
Profile of Sample Banks	2
Statement of the Problem	4
Objectives of the Study	5
Limitations of the Study	5
Significance of the Study	5
Organization of the Study	6
Chapter Two	
Literature Review	
Conceptual Review	7
Profits, Profitability and liquidity	9
Brief History of Growth of Banking System	13

The Structure, Scope and Objective of Modern Banking	14
History of Commercial Banks in Nepal	15
Credit Risk and Liquidity Risk	16
Review of Previous Studies	19
Review of Journal and Articles	19
Review of Previous Thesis	21
Research Gap	25
Chapter Three	
Research Methodology	
Research Design	26
Population and Sampling	26
Sources of Data	26
Data Processing and Presentation Procedure	27
Data Analysis Tools	27
Financial Tools	27
Statistical Tools	30
Chapter Four	
Presentation and Analysis of Data	
Evaluation of Liquidity Position of the bank	32
Liquidity Ratio	32
Cash Reserve Ratio	32
Total Loan to Total Deposit Ratio	33
Credit Risk Ratio	34

Evaluation of Profitability Position of the Bank	36
Return on Equity	36
Return on Assets	37
Net Profit to Total Deposit	38
Net Profit to Total Loan and Advances	39
Interest Income to Total Loan and Advances	40
Statistical Tools	41
Regression Analysis	43
Major Findings	45
Chapter Five	
Summary, Conclusion and Recommendation	
Summary	48
Conclusion	49
Recommendations	50
References	
Appendix	

List of Tables

Table No.	Particulars	Page No.
1	Sources of Demand and Supply of Liquidity within the Bank	12
2	Table of Cash Reserve Ratio	32
3	Table of Total Loan to Total Deposit Ratio	33
4	Table of Credit Risk Ratio	35
5	Table of Return of Equity	36
6	Table of Return of Assets	37
7	Table of Net Profit to Total Deposit	38
8	Table of Net Profit to Total Loan and Advances	39
9	Table of Interest Income to Total Loan and Advances	40
10	Table of Correlation Coefficient between Total Loan and Advances and Net Profit	42
11	Table of Correlation Coefficient between Total Loan and Advances and Total Deposit	42
12	Regression Analysis of NPAT on Total Loan and Total Deposit of MNBBL	43
13	Regression Analysis of NPAT on Total Loan and Total Deposit of MNBBL	44

List of Figures

Figure No.	Particulars	Page No.
1	Time Series Graph Related to CRR	33
2	Time Series Graph Related to Total Loan to Total Deposit	34
3	Time Series Graph Related to Credit Risk Ratio	35
4	Time Series Graph Related to ROE	37
5	Time Series Graph Related to ROA	38
6	Time Series Graph Related to Net profit to Total Deposit	39
7	Time Series Graph Related to Net profit to Total Loan and Advances	40
8	Time Series Graph Related to Interest Income to Total Loan and Advances	41

Abbreviation

Abbreviation	Full Form
BAFIA	:Bank and Financial Institute Act
CAR	:Capital Adequacy Ratio
CBBTDR	:Cash and Bank Balance to Total Deposit Ratio
CRR	:Cash Reserve Ratio
GBBL	:Garima Bikash Bank Limited
LQ	:Liquidity
MNBBL	:Muktinath Bikas Bank Limited
MRA	:Multiple Regression Analysis
NPL	:Non-Performing Loan
NPAT	:Net Profit after Tax
NRB	:Nepal Rastra Bank
RBB	:Rastriya Banijya Bank
ROA	:Return on Assets
ROE	:Return on Equity
SPSS	:Statistical Package for the Social Sciences
TD	:Total Deposits
TL	:Total Loans

CHAPTER- I

INTRODUCTION

1.1 Background of the Study

Financial institutions provide capital to the entrepreneurs for the development of industry, trade and business by investing saving collected as deposits. Bank is a resource mobilizing institution, which accepts deposit from various sources, and invest such accumulated resource in different sector like trade, commerce, industry etc. The commercial bank has its own role and contribution and it is an agent of economic development. Banks are the financial mediator of depositor and borrower. They also providing good services to their customers, facilitating their economic activities, thus, integrated and speedy development of the country is only possible. When competitive and reliable banking services are developed and carried to every hook and corner of the country. One of the basic objectives of establishing a commercial bank is to earn optimal profit by proper utilization of fund. By mobilizing public money and channeling the same to various business and production activities. Commercial banks contribute to the development of the country. In a developing country like Nepal, saving is low and scatters in small amounts which individuals residing in different corners of the country. Mobilization of such savings is made by commercial banks through their branches established in different parts of the country (*Sthapit, 2009*).

Liquidity Position and profitability are the two most important dimensions of any commercial banks. Liquidity is the most important element to the banks and financial institutions. In simple terms, it can be defined as the securities management of the cash balance in a systematic way. More broadly, the term Liquidity management can be defined as the process of readily converting assets and liabilities into cash immediately in a short span of time. Such liquid assets and liabilities include marketable securities, bills receivables, bills payable, short term loans, deposits etc. Liquidity measures the current financial position of the company through its capacity to pay dues at the time needed.

However, it has its pros and cons. Excessive liquidity leads to the loss of investment and profit opportunity while shortage of it results in customers' confidence erosion, thus losing their funds and placing the firm's survival at risk. Therefore, sound liquidity management involves prudently managing assets and liabilities, both as to cash flow and concentration to ensure that cash inflows have an appropriate relationship to approaching cash outflows.

This needs to be supported by a process of liquidity planning which assesses potential future liquidity needs, taking into account changes in economic, regulatory or other operating conditions.

The key to liability management is always being able to borrow. Therefore a bank's most vital asset is its creditworthiness. If there is any doubt about its credit, lenders can easily switch to another bank. The rate a bank must pay to borrow will go up rapidly with the slightest suspicion of trouble. If there is serious doubt, it will be unable to borrow at any rate, and will go under. In recent years, large banks have been making increasing use of asset management in order to enhance liquidity, holding a larger part of their assets as securities as well as securitizing their loans to recycle borrowed funds.

1.1.1 Profile of the Selected Development Bank

Muktinath Bikas Bank Limited (MNBBL)

Muktinath Bikas Bank Limited (MNBBL) was established on 19th Paush 2063 B.S. (i.e. 3rd January 2007 A.D.), The Bank is licensed by the Central Bank of Nepal to operate as a “B” Class National Level financial institution with its Central Office at Kamaladi, Kathmandu, Nepal. Today, Muktinath Bikas Bank is known as the leading Development Bank of Nepal with a history of its own. The citizens of Syangja District (a hilly district with tough geographical terrain) were starved for financial needs and the local people were undoubtedly had to travel to Pokhara (the only nearby metro, with approximately 38 Kilometer mountainous road linkage) for petty transaction such as withdrawal of mere NPR 5,000/- (approximately \$50). The cost of travelling and other involved security risk, hectic involvements and more costs thereon. Then, the need for an immediate solution to these problems was felt and a seed for the same was cultivated. The like-minded group of innovative local intellectuals from various sectors joined hands together to establish a local private sector Bank to resolve the issues being dealt by people of Syangja District. Likewise, on January 3, 2007, the proposed Bank got license from the Central Bank of Nepal (i.e. Nepal Rastra Bank) to operate Banking Business initially in three districts namely Syangja, Kaski and Tanahun of then Western Development Region (currently Gandaki Province) as a “B” class financial institution. Since inception, the Bank has been adopting the deep-rooted values of financial inclusion of the community and core principle of “Janata Bank ma Hoina, Bank Janata ma Janu Pardachha.” i.e. “People should not come to the Bank; Banks should go to the doors of people”. The Bank prioritized opening

branches in the rural areas where in the absence of any financial institution, people were in dire need for Banking services. The customer friendly products, services and door-to-door facility are the major factor for the Bank's popularity and success among the local people of the area. Within one and half years of operations in the month of April 2009, the Bank started a Microfinance Program in its host of services with starting a dedicated department at central office and branches to serve low income but high potential people with high productivity. The Bank was the first "B" class Bank with 3 pillars strategy of Modern Banking, Rural Banking & Micro Banking for serving low-income people with dedicated departments for the same.

Garima Bikas Bank Limited (GBBL)

Garima Bikas Bank Ltd. was established by a group of enthusiastic, dedicated and successful professionals and entrepreneurs from different fields including business, teaching, engineering, doctors, banking, accounting, management etc. The management team also consists of experienced, qualified and devoted professionals. The bank was incorporated under Company Act on Shrawan 22, 2064 and acquired license from Nepal Rastra Bank to perform its financial transactions on Ashwin 24, 2064. The bank started its formal operations on Kartik 18, 2064 from Waling 3, Syangja. After the successful merger between Garima Bikas Bank Limited and the then Nilgiri Bikas Bank Limited, the bank upgraded to National Level on Ashadh 29, 2072. The bank also merged the then Subhechha Bikas Bank Limited on Ashwin 04, 2073. On Chaitra 27, 2073 the bank shifted its' head office to Lazimpat, Kathmandu from Mahandrapool, Pokhara, Kaski. Currently the bank has 106 branches in 34 districts of the country.

All Nepalese banks are guided by NRB directives, internal guidelines and well as external guidelines such as BAFIA Act 2063, Anti Money Laundering and Terrorist Financing act, Banking Offence and Punsihment acts, etc. Unified Directives clarifies objectives, functions, responsibilities, authorities and preferences of the bank. It also clarifies the functions prohibited to the bank. It clarifies statutory ratios to be maintained by all banks and financial institutions.

Similarly, banks are guided by international laws such as BASEL-II, BASEL-III, Basel II is a set of international banking regulations put forth by the Basel Committee on Bank Supervision, which leveled the international regulation field with uniform rules and

guidelines. Basel II expanded rules for minimum capital requirements and provided the framework for regulatory review, as well as set disclosure requirements for assessment of capital adequacy of banks. It incorporates credit risk of assets held by financial institutions to determine regulatory capital ratios.

Basel III is a 2009 international regulatory accord that introduced a set of reforms designed to mitigate risk within the international banking sector, by requiring banks to maintain proper leverage ratios and keep certain levels of reserve capital on hand. Basel III was rolled out by the Basel Committee on Banking Supervision—then a consortium of central banks from 28 countries, shortly after the credit crisis of 2008.

1.2 Statement of the Problem

For each and every bank or financial institution it is very crucial to analyze the profitability and financial performance. Every banking sector cannot reach their objective without a good financial performance. The financial sector has not been responsive enough for them to meet the growing resources. In this competitive market each and every bank and financial institution need to analyze their financial situation to develop strategies and to identify the strengths and weaknesses. Similarly, investors are also needed to evaluate the performance of the companies for secured investment. In the Nepalese capital market financial institutions have dominated to the other sectors. Many researchers have been made in the field of the performance evaluation of the commercial banks among the financial institutions. However, the comparative performance evaluation between MNBBL and GBBL has not yet been made. So, it is felt to make a comparative study between the companies.

The statements of problems of this study are mentioned below:

- What is the liquidity and profitability position of MNBBL and GBBL?
- What is the trend of net profit, loan and advances and deposits?
- What is the relationship between net profit, loan and advances and deposits?
- To understand about financial performance of selected development bank

1.3 Objectives of the Study

The main objective of this study is to analysis the liquidity and profitability of the Nepalese development banks. The other specific objectives are as follows.

- To examine the liquidity and profitability and position of the MNBBL and GBBL.
- To analyze the trend of net profit, loan and advances and deposits of the selected banks over the last five years.
- To examine the relationship between net profits, loan and advances and deposits.

1.4 Limitations of the Study

Limitations of the study are as follows:

- It has been conducted in the limited time and resources.
- The study mainly focuses with the profitability and liquidity situation of MNBBL and GBBL.
- Generally it is mainly based on secondary data like balance sheet, profit and loss account and other useful documents.
- It is covering the period of 5 years from 2015/16 to 2019/20 of MNBBL and GBBL.
- The study relies heavily on secondary data only.

1.5 Significance of the Study

The study is needed because it is very useful to the companies to identify the strengths and weakness of the respective companies, students for further researches, interested person, investors etc. Some of the reasons are summarizes in the following:

- It is helpful to the shareholders to identify the financial performance of the respective banks and to analyze and to compare the financial position and productivity.
- It is useful to the students of banking and finance to study the profitability and productivity.
- This study will be helpful to the public to analyze risk of the banks. Its help to public to believe that their fund may secure or may not secured.

1.6 Organization of the Study

This research has been organized in the manner below:

Chapter I – Introduction: The first chapter deals with introduction. This includes background, statement of problem, objectives of the study, and limitation of the study.

Chapter II – Review of Literature: Different books, journal, periodicals etc. are reviewed during the study period and these are shown in this chapter.

Chapter III – Research Methodology: This chapter clarifies the nature of the whole research. It includes, research design, sources of data and collection procedure etc. similarly, data are analyzed using different tools and techniques and all of these techniques are briefly defined in this chapter.

Chapter IV – Presentation and Analysis of Data: The fourth chapter presents the data collected different sources. Based on the data analysis of stock market has been performed.

Chapter V – Summary, Conclusion and Recommendation: In the fifth chapter summaries the main conclusions and offers suggestions for further improvement.

After completion of these five chapters, a list of literature that reviewed earlier is included alphabetically in **bibliography**. Likewise, data, information, calculation sheet etc are incorporated in **appendix**.

CHAPTER - II

REVIEW OF LITERATURE

This section attempts to build strong theoretical background through the help of which further search for solutions of the research problems would be easier. Resource mobilization: its theoretical background, academic insights, nature, advantages, importance and other various issues are addressed here in this chapter as contributed by different management experts and others towards this field. While reviewing literature different sources like books, documents, bulletins, reports, journals and articles etc. are consulted.

2.1 Conceptual Framework

This section presents the concepts of key terms used in this research.

Profit: We have to clarify the meaning of profit first. Generally, profit is the making of gain in business activity for the benefit of the owners of the business whereas profitability indicates the ability to earn a profit. An Income Statement is traditionally used to measure profitability of a company. A pro-forma income statement shows projected profitability of company.

Dictionary meaning of profit is the money that you make in business or by selling things, especially after paying costs involved, the advantage that you get from doing something (Hornby, 2000).

Profit is essential to survive in any business concern for its successful operation, future expansion and growth. It is the primary measures of success of business organization. It is the excess income over the cost of production. The word 'profit' implies a comparison of the operations of business between two dates, which are usually separated by an interval of one year. The term 'profit' is very controversial and there are different interpretations about it. It has various dimensions and views to be realized. The researcher has already accepted the view of Lynch and Williamson, an economist, labour leader, investor, revenue agent and an accountant of the concern has different view about profit. An economist can view that profit is the reward for entrepreneurship for risk taking. A labour leader might say that it is a measure of how efficiently labour has produced and that it provides a base for negotiating a wage increase. An investor can view it as a measure of the return on his or

her money. An internal revenue agent might regard it as the base for determining income taxes. The account can define it simply as the excess of a firm's revenue over the expense of producing revenue in a given fiscal period.

Profit is the reward for risk taking in business. An entrepreneur earns profit as reward for his innovations. Arguments of economists on profit may be put in three broad groups. The first looks upon profit as the reward for bearing risks and uncertainties, the second views profit as the consequence of perfection and in-perfection in the competitive adjustment of the economy to dynamic change, the third sees profit as the reward for successful innovation (Joel, 1997). It could be noted that profit is residual income left after the payment of the contractual rewards to other factors of production (Mathuva, 2009).

Profit is the primary measure of operational efficiency of a business firm. The success of business depends largely upon the profit earned by the business. In other words, the managerial efficiency of any concern is reflected upon the volume of profit. So, profit is a signal for the allocation of resources and a standard for judging managerial efficiency (Kulkarni, 1985).

It can be concluded from these definitions that there is no definite definition of profit. It depends on the definer's views; and their interest. The researcher would use the profit as revenue after cost of production. Under the cost of production, all factors of production should be considered for e.g. house rent, labour wage, material cost, machine cost, cost of capital as well as opportunity cost of capital.

Profitability: Profitability of a firm is measured in terms of the firm's sales, total assets, and equity or share value. These provide the base to analyze the firm's earnings with respect to a given level of total assets, the ownership investment or share value. Higher the ratios of the firm, higher will be the profitability and vice versa. In case of a bank, we can take total deposit as equivalent meaning of sales.

Liquidity: Dictionary meaning of liquidity is the state of owning things of value that can easily be exchanged for cash. Any business organization uses different assets while operating the business but these all assets are not liquid. As for example, land and building, vehicle, office equipments etc. are not liquid assets. Liquid assets are those assets which

can be converted into cash promptly. Cash in hand, bank balance, gold etc. are examples of liquid assets. Therefore, liquidity is the state in which one can change its assets into cash soon.

It is already discussed that the profit of a business is the difference between its revenues and its costs. It is important to consider two main types of profits:

1. **Gross profit** - is calculated by deducting the cost of sales of a business from its sales revenue (turnover).

2. **Operating profit** - is calculated by then taking away overhead expenses from gross profit.

2.1.1 Profits, Profitability and Liquidity

2.1.1.1 Introduction and Definitions

Amongst many criteria of business success, there are two which are expressed in financial terms, namely profitability and liquidity. Profit is the excess of resources earned over resources expended or income less costs. Various profit figures (gross, net, pre-tax etc.) for the period can be read from the Profit and Loss Account (US term "Income Statement"). Profitability is the relationship between profits and capital (the "static" resources set aside to earn those profits). Measuring profitability means that you have to relate a profit figure (from the Profit and Loss Account) to a resources figure (from the Balance Sheet).

In short, profit is the measure of gain, and profitability the relation of this gain to the firm's assets. If profitability exceeds the cost of the firm's capital, that is the interest rate at which it can borrow money, it can call it successful.

It is beneficial to society as a whole if less profitable businesses give up their resources to more profitable, because the total profit earned will rise, other things being equal. For this to hold true private and public profit must be equivalent; this is not the case where, for example, profit earners cause there to be social costs, such as atmospheric pollution or noise.

Liquidity may be defined as the ability of a firm to meet its financial obligations as they fall due. The balance sheet (defined as "a structured statement of assets and liabilities") measures these resources and claims, and describes the liquidity of the firm i.e. the

relationship between assets and liabilities see also (LD10, Accounting Theory and the Purpose of Accounting).

2.1.1.2 Objectives, Profitability and Liquidity

Profit may be seen as an end in itself (i.e. the "mission" - see LD02) but it is better viewed as a necessary means to an end, namely the survival and growth of the organisation. Japanese companies and some others are reported as seeing profits as a cost of staying in business, which is an echo of the economists' view of normal profits as a cost of capital, with any excess or deficit being cleared over time as new firms move into, or out of, the industry.

Likewise, liquidity is a constraint which must be satisfied both directly, in that firms must settle their debts, and indirectly, in that they must also report an ability to continue to do so. If in the annual accounts, a firm reports poor liquidity, this may cause such a fall in confidence that its state becomes a self-fulfilling prophecy, as creditors demand immediate payment, the classic example being "a run on the bank".

2.1.1.3 Measuring profitability and liquidity

Whereas definition and discussion of the concepts are activities beloved by academics, their practical day to day expression and measurement is a matter for business personnel and accountants. Large organisations may employ accountants or, like smaller firms, hire the services from independent professionals. There is an associated profession whose skills overlap, namely of auditing, whose function is to validate the work of the accountant through an independent evaluation of the accounts.

Such expressions and such measurement require care, routine and administration as well as an understanding of the principles involved. All the levels of profit (gross, operating, net and retained) are expressed in the various sections of the Profit and Loss Account (my definition being "a structured statement of income and expenses"). The measurement of profit is, in fact, very difficult and it is to cut through the problems of principle that accountants adopt a number of "rules of thumb", such as depreciation in equal instalments over the estimated useful life of the project (see also LD14, Depreciation).

2.1.1.4 Book-keeping

The book-keeping activities of the firm begin with data capture and then serve two main purposes, firstly as part of the day to day administration of the firm's business (i.e. the payment of bills and the receipt of money owing) and secondly to classify the firm's transactions. When sorted into liabilities, assets, income and expenses, these transactions, drawn up into "accounts", and with appropriate adjustments to bridge the gaps between the transactions and economic reality, provide the "Final Accounts" which provide the expression of profit and liquidity that are the subject of this digest (see also LD11, Accounting Statements and LD20 Book-keeping). Viewed as a whole, these activities give rise to a "magic pool of information" from which all can make extractions without diminishing the pool.

2.1.1.5 Measuring Liquidity

Liquidity, which is much easier to measure than profit, is shown in the Balance Sheet, which can be seen (Chart 2, Appendix 1) as simply an accumulation of timing differences. There is a quantity dimension and a time dimension to liquidity - it is no good having money coming in tomorrow if you need it now - that is unless you can persuade your creditor to wait. If you hold cash or readily realisable assets such as shares, your liquidity is soundly based. If it consists of debtors, it is dependent on their ability and willingness to pay. If it consists of goods, liquidity is a function of the saleability of those goods and may be low if they are not in demand. For the Christmas season of 1984, Acorn and Sinclair Computers, both over-estimated sales so badly that they were left with large stocks of home computers. In each case this was a major factor causing the company (and the British position in micro-computers) to collapse (Firoj, 2010).

Measuring Liquidity

Liquidity, which is much easier to measure than profit, is shown in the Balance Sheet as simply an accumulation of timing differences. There is a quantity dimension and a time dimension to liquidity - it is no good having money coming in tomorrow if you need it now - that is unless you can persuade your creditor to wait. If you hold cash or readily realisable assets such as shares, your liquidity is soundly based. If it consists of debtors, it is dependent on their ability and willingness to pay. If it consists of goods, liquidity is a function of the saleability of those goods and may be low if they are not in demand. For the Christmas season of 1984, Acorn and Sinclair Computers, both over-estimated sales so

badly that they were left with large stocks of home computers. In each case this was a major factor causing the company (and the British position in micro-computers) to collapse (Fisher, 2010).

Table 2.1

Demand and Supply for Liquidity within the Bank

Supplies of Liquid Funds Come From:	Demands for Bank Liquidity Typically Arise From:
Incoming customer deposits	Customer deposit withdrawals
Revenues from the sale of non-deposit services	Credit requests from quality loan customers
Customer loan repayments	Repayment on non-deposit borrowings
Sales of bank assets	Operating expenses and taxes incurred in producing and selling services
Borrowings from the money markets	Payment of stockholder cash dividends

(Noted from: Ross, 2002)

2.1.1.6 Liquidity vs Profitability

The financial manager is always faced with the difficulties of liquidity vs. profitability. He/She has to strike a balance between the two. The firm has adequate cash to pay for its bills. II) The firm has sufficient cash to make unexpected large purchases and, above all. III) The firm has cash reserve to meet emergencies, at all times. Profitability goal, on the other hand, requires that the funds of the firm are so used so as to yield the highest return.

Liquidity and profitability are very closely related. When one increases the other decreases. Apparently liquidity and profitability goals conflict in most of the decisions which the finance manager makes. For example, if higher inventories are kept in anticipation of increase in prices of raw materials, profitability goal is approached but the liquidity of the firm is endangered. Similarly, the firm by following a liberal credit policy may be in a position to push up its sales but its illiquidity decrease.

There is also a direct relationship between higher risk and higher return Higher risk on the one hand endangers the liquidity of the firm, higher return on the other hand increases its profitability. A company may increase its profitability by having a very high debt equity ratio. However, when the company raises funds from outside sources, it is committed to

make the payment of interest, etc. at fixed times and in fixed amounts and hence to that extent of its liquidity is reduced.

Thus, in every area of financial management, the financial manager is to choose between risk and profit and generally he chooses in between the two. He should forecast cash flows and analyse the various sources of funds. Forecasting of cash flow and managing the flow of internal funds are the functions which lead to liquidity, cost control and forecasting future profits are the functions of finance manager which lead to profitability. An efficient finance manager fixes that level of operations where both profit and risk are optimised (Duke, 2010).

2.1.2 Brief History of Growth of Banking System

The modern banking performing various functions is quite recent growth. But the origins of banking can be traced very far back into history. In this respect Marshall on his book “money credit and commerce has started that the traces of rudimentary banking can be found in Egyptian and Phoenicia history.” There are records of money lending by the temples of Babylon as making loans testing and exchanging coins and arranging credit transactions and silver. Roman law recognized transfer of funds in a bank in payment of debt in 5th century. But along with the down fall of the Roman empire its civilization and the beginning of the dark age towards 475 A.D. all the banking practice took place towards 12th century and there is evidence that by the 14th century there was a high developed system in several Mediterranean cities (Klise, 2004).

The forerunners of modern banking are three ancestors they were merchants, the moneylenders and Gold Smith in England, gold smith were main origin of private banks. While in France the trail ants or revenue formers represents the earlier forms of bank, in earlier age those ancestor of modern banking practiced the function of accepting deposits of others, charging some interest for custody of money, gradually other functions were also developed and practiced as accepting of deposit by paying interest for attracting more deposit, by advancing loans on security basis fund transferring, issue notes and cheque and so on.

Mainly development of modern commerce banks was only since the 19th century, the 20th century observed development of various banking institutions which were highly

specialized particularly in developed countries like USA, FRANCE, USSR etc. but nowadays there are various international intuitions has been developed such as IMF, IBRD, ADB etc which are key to the developed of modern international business (Mathur, 2007)

2.1.3 The Structure, Scope and Objective of Modern Banking

The banking system of word has many similarities but they also differ sometime in quite material aspects. The principle differences are in the details of organization technique the national charter, history, laws and needs. The differences are gradually becoming less because of the growing efficiency of international communication and habit of practices that has been successful in another country. Banking system may be classified in terms of their structure and purpose (Sayers, 2009).

Modern developed financial system will be classified in following points:

- Central Bank.
- Commercial Bank.
- Other financial institutions.

Central Bank: It is the bank of apex origin of government itself for the purpose of performing all major financial operation of the government or economy as the whole. In other word it guides, directs supervisor's controls and influences the operation and behaviour of all other financial institutions for economic welfare.

Commercial Bank: Those types of financial institutions that mainly deal with the activities of the trade commerce, industry and agriculture are commercial banks. The main objective of commercial bank is to mobilization ideal resources in productive use after collecting them from scattered sources and for profit maximization purpose.

Other Financial Institutions: Other financial institutions may be classified as following:

- The industrial banks providing long and medium term credit for development of industries.
- The agriculture banks supplying financial assistance for agricultural development.
- The saving banks
- Investment banks to foster investment activities of investors.
- Co-operative institution for the development of rural area.
- Hire purchase financial companies.
- Insurance companies etc.

2.1.4 History of Commercial Banks in Nepal

Though the modern banking institutions have a very recent origin in Nepal, some crude bank operations were known to have been practice even in he ancient time. Effect of Indian currency is too much in the early stages of banking development Indian currency is circulated throughout the country. Though the term bank is new thing for Nepalese economy there was banking business in the form of money lending business done by several persons. The this respect J.C. Ojha says, it is not possible to give correct chronological history in view of the fact that not authentic historical record is available in respect of banking, it can be inferred from references in the history of Nepal regarding rebuilding of Kathmandu in 723 A.D. Guna kama Deva form the borrowing and that of Shankhadhar (a Sudra merchant) action of introduction of Nepalese sambat, Some 57 years and there after to mark the repayment of all debts that money lending have been prevalent long before that (Ojha,2005).

Tankadhari did money-lending business during the ruling of Jyasthiti Malla in 14th century. He classified the people in 64 classes on the basis of their occupations. Tankadhari were one of them who occupy money lending and commercial business activities, money-lending business particularly for financing the foreign trade with Tibet become quite popular during the reign of Mallas. If we go through the Nepalese history we find that Nepalese participation in foreign trade with Tibet and India. The moneylenders at that time advance for commercial transactions against personal security, the farmer also uses to borrow money from such moneylenders.

On the history of banking development of Nepal Y.P. Pant says, the history of banking and currency in the country become definite only from the 15th century that is in the Lichhivi period when the first coins were minted tin the advance of the 7th century coins of red copper started to be used for exchange purpose. Later on during 12th century in the works of various reforms measures initiated by the rulers particularly during the Mallas period stated the inspiration of the king's names and dates on the coin (Pant, 1979).

During the periods from sixteen to eighteen centuries refinement in the coins age and developments in he indigenous banking were brought into circulations for the first time not only this the factor of Nepal sending its coin to circulation in Tibet as legal tender, shows

the predominant passion or this country in the internal and external economy of Himalaya. Such trends are indicative of the development of currency and banking (Pant, 1979).

Further steps were taken on this ground Ranodip Singh (1877 to 1885) established Tejarath in Kathmandu. Tejarath was Government financial institution supplying credit to people at 5% rate of interest against security of gold silver and armaments (Shrestha; 2007). Government servants can also take loans from Tejarath against the personal security. During the time of Chadra Samser (1901-1929) credit facilities of Tejarath were extended to some other parts of country by opening its branches. At the time the volume of loan for consumption purpose was large and to control serious rate of interest ranging from 75% to 35% and also to curb unfair practices on the part of the unscrupulous moneylenders. On this ground Y.P. Pant says, in the over all department of banking system in Nepal the *Tejarath Adda* may be regarded as the father of modern banking institutions and for quite a long time it rendered good services to the government to servant as well as to the general public the institutions adopted one of elementary functions of the granting loans against gold, silver and other collateral securities which probably was not considered to be a function falling within the competence of banking (Pant,1979).

In the Nepalese history Nepal bank Ltd. was established in 1994 (BS) as a first modern bank in 2013 (BS). Nepal Rastra Bank was established under the Nepal Rastra Bank Act 2012 B.S. as an apex body of banking institutions. Following the establishment of Rastriya Baniya Bank in 2022 B.S. several joint venture banks were established in Nepal. Among them Nepal Arab Bank Ltd. is the first joint venture bank established in Nepal. Thereafter Nepal Indosuez Bank Ltd, Nepal Grindlays Bank Ltd., Himalayan Bank Ltd., Nepal SBI Bank Ltd., Nepal Balgaladesh Bank Ltd., Everest Bank Ltd., Bank of Kathmandu Ltd., Nepal Bank of Ceylon etc. were established (Khadka, 2008).

2.1.6 Credit risk and Liquidity risk

Credit risk is an investor's risk of loss arising from a borrower who does not make payments as promised. Such an event is called a default. In other words, it is the probability that some of the bank's assets, especially its loans, will decline in value and perhaps become worthless.

Significant resources and sophisticated programs are used to analyze and manage risk. Most lenders employ their own models (credit scorecards) to rank potential and existing customers according to risk, and then apply appropriate strategies. With products such as unsecured personal loans or mortgages, lenders charge a higher price for higher risk customers and vice versa. With revolving products such as credit cards and overdrafts, risk is controlled through the setting of credit limits. Some products also require security, most commonly in the form of property.

Credit risk has been shown to be particularly large and particularly damaging for very large investment projects, so-called megaprojects. This is because such projects are especially prone to end up in what has been called the "debt trap," i.e., a situation where – due to cost overruns, schedule delays, etc. – the costs of servicing debt becomes larger than the revenues available to pay interest on and bring down the debt.

Liquidity Risk is the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss (or make the required profit). Such risk arises from situations in which a party interested in trading an asset cannot do it because nobody in the market wants to trade that asset. Liquidity risk becomes particularly important to parties who are about to hold or currently hold an asset, since it affects their ability to trade.

Manifestation of liquidity risk is very different from a drop of price to zero. In case of a drop of an asset's price to zero, the market is saying that the asset is worthless. However, if one party cannot find another party interested in trading the asset, this can potentially be only a problem of the market participants with finding each other. This is why liquidity risk is usually found to be higher in emerging markets or low-volume markets. It is financial risk due to uncertain liquidity. An institution might lose liquidity if its credit rating falls, it experiences sudden unexpected cash outflows, or some other event causes counterparties to avoid trading with or lending to the institution. A firm is also exposed to liquidity risk if markets on which it depends are subject to loss of liquidity (*Singh, 2005*).

Hence, to overcome the liquidity problem, the financial institution can increase a bank's cash and readily marketable assets, such as government securities, or using long term liabilities to fund the bank's operation.

- **Review of NRB directives relating to Loan**

Nepal Rastra Bank has classified the outstanding principal amount of loan and advances on the basis of aging. As per the directives issued by NRB, all loans and advances shall be classified into the following five categories:

- a. **Pass Loan:** Loans and advances whose principal amount is not past due and past due for a period up to 3 months shall be included in this category. These are classified and defined as performing loans.
- b. **Watchlist:** Loans and advances which are overdue up to 3 months is considered to be watchlist. Watchlist loan also include following as well
 - Extending the loan period without renewing the loan
 - If the borrower has been listed in Non-performing loan in other B&FIs
 - If the borrower paying interest and fee but his project is continuously bearing negative cash flow for the last 2 years.
 - If a single bank advances the loan of the amount of 1 Arab (100 Crore). It should be consortium/syndicate loan
 - If NRB list the borrower in watchlist because his/her project does not fulfil the NRB standard
- c. **Sub-Standard Loan:** All loans and advances that are past due for a period of 3 months to 6 months shall be included in this category.
- d. **Doubtful Loan:** All loans and advances which are past due for a period of 6 months to 1 year shall be included in this category.
- e. **Loss:** All loans and advances which are past due for a period of more than 1year as well as advances which have least possibility of recovery or considered unrecoverable and those having thin possibility of even partial recovery in future shall be included in this category.

The *loan loss provisioning*, on the basis of the outstanding loans and advances and bills purchases classified as per this directives, shall be provided as follow

Classification of Loan	Loan Loss Provision
Pass loan	1%
Watchlist	5%
Sub-standard loan	25%
Doubtful loan	50%
Loss	100%

(Source: NRB Directive, 2077)

2.2 Review of Previous Studies

2.2.1 Review of Journals and Article

Sthapit and Maharjan (2012) conducted his research on “Impact of Liquidity Management on Profitability: A Comparative Study between NABIL and SCBN”. The present study aims to reveal the relationship between liquidity and profitability of NABIL and SCBN while in conducting day to day operations. Comparing those two old private commercial banks in Nepal, this paper examines the effects of liquidity on profitability. To address the objective, the article has taken NABIL and SCBN for the period between 2003/04 and 2010/11. Considering the liquidity management can increase the profitability, the study has examined their liquidity management of NABIL and SCBN as well as profitability positions, using various financial tools and indicators. It was found that trend of average liquidity ratios and profitability of both banks are not seems to be fluctuating but average variation in liquidity ratios as well as profitability of SCBN is lower than that of NABIL. The study concluded that the LFTDR and NRBTDTR have a negative significant effect on ROA of SCBN whereas CHTDR has a positive significant effect. But liquidity ratios have not significant effects on profitability of NABIL. Therefore, the liquidity performance of SCBN is better than NABIL.

Hakuduwal (2014) conducted his research on "Impact of Internal Factors on Profitability of Nepalese Finance Companies" . The objective of this research aims to analyze the impact of assets, deposits, equity and loan on profitability of finance companies in Nepal. Further, The study is based on the descriptive and analytical research design using secondary data. It used correlation analysis, regression analysis F-test and t-test to observe and test the hypotheses as analysis tools. The key findings of this research is a positive significant impact of assets, loan and deposits on ROA of finance companies but there is negative significant impact of equity on ROA of finance companies of Nepal. Similarly, the researcher discovered that the implication for the financial managers of the finance companies as the study findings relate to how they should manage their assets, loans, deposits and equity in view of increasing their ROA.

Ogunayo and Adeyemi (2015) conducted their research on "*Causal Relationship between Liquidity and Profitability of Nigerian Deposit Money Banks*". The main objective of this research is to examine the existence and direction of causality between liquidity and profitability of deposit money banks in Nigeria. For this study, the researcher had taken

fifteen commercial banks out of nineteen banks in order to out to determine the presence and direction of causality between banks' liquidity and profitability. Researchers used the secondary data for this study. The result found that the F-statistics corresponding to the null hypotheses of no causal relationship (both unidirectional and bidirectional) between LODEP (a proxy for liquidity) and ROE (profitability measure) for banks at 5% and 10% level of significance. Thus, the result revealed that there is no causal relationship (be it unidirectional or bidirectional) between liquidity and probability of banks. The study recommend that the apex bank (Central Bank of Nigeria) should ensure the close supervision and monitoring of deposit money banks' strength and level of liquidity in an attempt to stabilize and strengthen the financial sector of the economy.

Muhammad (2017) conducted on "*Impact of Liquidity Management on Profitability in the Pakistani Commercial Banks*". The purpose of this research was to investigate the effect of the liquidity management on profitability in the Pakistani commercial banks during the period (2004–2013). Total of Three banks having more than 1767 branches are chosen to reflect the whole Pakistani commercial banks. The liquidity indicators are investment ratio, current ratio, capital ratio, credit facilities and liquid assets ratio, while return on equity (ROE) and return on assets (ROA) are the proxies for profitability. The researcher depicted that there is a need for an optimum utilization of the available liquidity in a various aspects of investment in order to increase the banks' profitability, and banks should adopt a general framework of liquidity management to assure sufficient liquidity for executing their operations efficiently, and they should initiate an analytical study of the evolution rates of liquidity and their ability to achieve a balance between sources and uses of funds.

Moussa and Boubaker (2020) conducted on "*The Impact of Liquidity on Bank Profitability: Case of Tunisia*". Liquidity and profitability are two important variables in the banking industry. In this article, we studied. The impact of liquidity on bank profitability in the Tunisian context. We used a sample of 18 banks over the period (2000...2017). We employ 2 models of panel static in the empirical research. We found that (liquid assets / total assets) and (total credits / total deposits) have a positive and significant impact on return on assets (ROA) whereas (current assets / current liabilities) have not significant impact on ROA. Also, we found that (liquid assets / total assets), and (total credits / total deposits) have a negative and significant impact on ROE (return on equity). Whereas (current assets / current liabilities) have not significant impact on ROE.

2.2.2 Review of Previous Thesis

Maharjan (2015) conducted the study on “*Profitability Analysis of commercial Banks (A case study of Rastriya Banijya Bank And Nepal Bank Ltd.)*”, has made following objectives and major findings:

Objectives:

- To evaluate the profitability and operating financial efficiency of Nepal Bank Ltd. and Rastriya Banijya Bank.
- To compare and analyze the fund based interest income with fee based income of Nepal Bank Ltd. and Rastriya Banijya Bank.
- To analyze the profit and loss trend and growth of the bank over the period.

Major Findings:

- The operating efficiency ratio of both the banks is very unfavorable during the study period due to the huge amount of operating expenses in compare to the operating income
- RBB and NBL had very low net interest margin. The net interest margin of RBB was higher the net interest margin of NBL
- The FSRP was in operation in both the banks, the operating expenses of both the banks were in increasing each year. Both the banks have high staff expense related to total operating expense due to over staffing. Under the FSRP, the bank have implemented VRS to cut down the number of staff and still both the banks have to rethink to maintain the appropriate level of staff to minimize the staff expenses.

Khanal (2016) conducted the study on, "*Comparative study on Liquidity management of Everest Bank Ltd and Himalayan Bank Ltd*" has made following objectives and major findings:

Objectives:

- To examine the efficiency and effectiveness in disbursing and recovery of loans.
- To compare and analyze the financial performance of EBL and HBL.
- To analyze the profit and loss trend and growth of the bank over the period.

Major Findings:

- Liquidity position of EBL is comparatively better than HBL as it is sound in meeting short term obligations.

- EBL is more efficient in utilizing the outsider's funds in extending credit for profit generating sectors while HBL is more successful in utilizing its total deposits by investing in marketable securities.
- Both banks have positive correlation among deposit, loans and advances, investment, total assets and net profit.
- Both banks are unable to mobilize idle assets of the banks in the form of excess cash and equivalents diverted in various investment opportunities available in the market.

Shrestha (2017) conducted the study on “*Productivity Measurement of Credit Position in Nepalese Commercial Banks (with reference to BOK and NIBL)*” has made following objectives and major findings.

Objectives:

- To explore the productivity measurement on credit position of BOK and NIBL.
- To inspect the level of the non-performing loan investments that exists within the banking industry.
- To analyze the lending policy of Nepalese commercial banks with the help of BOK and NIBL.

Major Findings:

- NIBL have high liquidity than BOK. Likewise, fluctuation in CRR ratio is lower of BOK in relation to NIBL.
- BOK has higher investment in government securities than NIBL.
- BOK has the highest average ratio of loan and advances to total deposit.
- Among the sampled banks, NIBL bank has maintained the low mean non-performing assets to total loan and advances ratio with 1.33% while BOK is 1.94%.
- NIBL has increased collecting interest bearing deposits but BOK has managed to reduce the ratio, which means their non-interest bearing deposits are growing. NIBL has highest interest bearing deposits.

Rouniyar (2018) conducted on “*Liquidity & profitability Analysis of Listed of Four Commercial Banks (with reference to NABIL, SCBNL, EBL and SBI)*” has made following objectives and major findings:

Objectives:

- To assess the profitability and liquidity position of the commercial banks,
- To evaluate the relationship between selected dependent and independent variables regarding liquidity and profitability of the banks.

Major findings:

- From the ten years analysis i.e. fiscal year 2001/02 to 2010/11 return on equity is highest of SCBNL and lowest of SBI among the four sample banks. SBI has more risky than other sample banks.
- In the same way, return on capital fund or employed to risked assets for SBI is more volatile than other sample banks. SBI has not managed its profitability to maintain capital adequacy than other sample banks. NABIL is more uniformity which has less CV than others.
- Net profit to total deposit ratio for the bank is satisfactory i.e. well management in earning profit. Net profit to total loan and advances ratio is highest of SCBNL.

Shrestha (2019) has conducted on the topic of *Credit Risk Management of Joint Venture Banks (with reference to EBL and SBI)*" has following objectives and major findings.

Objectives:

- To analyze the credit risk (NPL to TL) of joint venture banks in Nepal.
- To evaluate total credit to total deposit and overall credit management in commercial banks.

Major findings:

- Both banks have maintained NPL less than 1% in an average i.e. maintained NRB directive.
- Lending in one lucrative sector and concentration in urban areas only is increasing the risk of loss for the bank credit policies and practices is found satisfactory.
- Bank has opportunity to explore the virgin village market and SMEs.
- Both banks total credit to total deposit ratio is higher of EBL than SBI.
- Both banks' have maintained the sound management quality in general.

Kharel (2019) conducted on '*Liquidity Management of Commercial Banks of Nepal (with reference to NABIL and SBI)*' has made the following objectives and major findings.

Objectives:

- To analyze the trend of liquid management by the commercial banks.
- To evaluate the cash reserve ratio maintained by the NABIL and SBI.
- To analyze the total loan and advances, total investment provided by the NABIL and SBI.

Major Findings:

- The liquidity position of NABIL is very strong while SBI have strong capacity to meet the short term obligations.
- SBI have invested significant portion of deposit to total investment than other.
- total deposit, investments and loans and advances of both banks are in increasing trend.
- The trend line of loan and advances for both banks is upward slopping which refers to the increase in the disbursement of loan and advances.
- NABIL is successful in optimizing the assets mobilization due to its highest ROA than SBI.
- The credit risk of SBI is more stronger than NABIL i.e. non-performing loan of SBI is less than 1% as maintained by NRB directives during the study period.

Pandey (2019) research on “Liquidity and Profitability Analysis of Standard Chartered Bank Nepal Ltd. and NABIL Bank Ltd.” He used the both statistical and financial tools on the basis of secondary data. The objectives of this study were as follows.

Objectives :

- To evaluate the soundness of profitability and operating efficiency of SCBNL and NABIL Bank Ltd.
- To compare and analyze the fund base interest income with fee based income of SCBNL with NABIL Bank Ltd.
- To compare the cost of deposits of the SCBNL with NABIL in regards with the profitability.

A major findings of his study were given below.

- The cost management strategy was ideal to reduce the various costs and increase the profitability.

- The bank was not followed the strictly investment policy to avoid the non-performing assets and felt to increase investment in the government securities to trade off and stabilized the quality investment in commercial LDO.
- Both banks maintained the cash reserve ratio as directed by NRB.
- Net profit to total assets ratio is in fluctuating trend during the study period.
- Both banks was not given the focus on planning, research and development for the proper planning and controlling purpose which the management in regards the cost control strategy and avoid unnecessary leakage in the expenses.

2.3 Research Gap

In banking industry, liquidity is very essential in regards to financial performance of the banks. In other words, excess liquidity is the poorer to generate the profitability of the development banks. For instance, more cash reserve in banks cannot generate the interest income rather it bear/losses of interest expenses. On the other hand, profitability depicts the long-term aspects of the development banks. Further, development banks can success to provide dividend to its shareholder only when it earns profit. For this, fund must be utilized in the productive sector or investment in order to generate profit. Henceforth, there is opposite relationship between liquidity and profitability.

After reviewing different literatures it is found that pervious researchers have analyzed profitability condition using different tools and techniques. However, financial surplus to equity and financial surplus to assets ratio in order to analyze the short run profitability is not seen employed. All the development banks lend their deposits on different sectors of the economy. But all the sectors are not worsening in today's scenario. Even some sector is flourishing today. Sector wise lending portfolio of development banks is not effective. Bank can still lend without increasing their non performing asset if they focus on identifying the new market for lending and if they properly analyzed the proper sector for lending. This research "Liquidity and Profitability Analysis of Development Banks (A comparative study of Muktinath Bikash Bank Ltd. and Garima Bikash Bank Limited) gives the mirror of banking industry. Hence, liquidity and profitability analysis is also new and crucial research and vary from the others. For that purpose, latest ten years data and different research tools have been used for analyzing the data which is discussed in chapter-III. Therefore, to some extent, the gap is to be fulfilled through this research.

CHAPTER III

RESEARCH METHODOLOGY

Research methodology consists of research design, source of data, population and sample and method of data analysis.

3.1 Research Design

Research design is the plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances. In other words research design is the frame work for a study that helps the analysis of data related to study topic. A research design is the arrangement of conditions, for collecting and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. This study is designed in descriptive manner. This research work tried to analyze the liquidity management of the joint venture commercial banks of Nepal.

3.2 Population and Sample

In the present context, there are 30 development banks operating in Nepal. The study of all these banks within this research was almost impossible. Hence, considering these number of banks as total population, only two development bank namely Muktinath Bikas Bank Limited (MNBBL) and Garima Bikas Bank Ltd.(GBBL) within from these total population has been taken as sample and tried to achieve the objectives set out by analyzing the data. The study was based on secondary data only. Only two development banks were taken into account, which represents almost same strategic groups. Financial as well as statistical tools were used to analyze and interpret.

3.2.1 Sources of Data

This study mainly based on secondary data. Secondary data are collected from their respective annual report especially from profit and loss account, balance sheet and other publications made by the banks. Also some data has been gathered from Nepal Stock Exchange's Website. Similarly, articles, journals related to the financial performance study, previous research report etc., have also taken into account while collecting information.

3.2.2 Data Processing and Presentation Procedure

The information or data obtained from the different sources in raw form. From that information, direct presentation was not possible so it was necessary to process data and convert it into required form. Only after then the data were presented for this study. For presentation different tables were used. Similarly in same case graphical presentation were also made. So far as the computation was concerned, it has been done with the help of using Microsoft Excel.

3.2.3 Data Analysis Tools

Liquidity and Profitability position of the banks is analyzed with two important tools. The first most important tool is the financial tool, which includes ratio analysis and another is a statistical tool.

3.2.3.1 Financial Tools

The following financial ratios are going to be analyzed under the liquidity and financial position analysis of selected two commercial banks.

A) Liquidity Ratio

Liquidity ratios are used to judge a firm's ability to meet short-term obligation. It is the comparison between the short-term obligations and short-term resources available to meet these obligations. Liquidity ratio should neither be inadequate nor high. If the liquidity ratio of the bank is not enough, it will result in bad credit ratings, less creditors, confidence, eventually may lead to the bankruptcy. If the company has high degree of liquidity funds, it wills unnecessary tied up in current assets. Thus the banks should endeavor to maintain proper balance between inadequate liquidity and unnecessary liquidity for the survival and for avoiding the risk of insolvency. The following ratios are used to find out the short-term solvency of the banks.

a. Cash and Bank Balance to Total Deposits Ratio

Cash and bank balance to total deposits ratio measures the capacity of bank to meet unexpected demand made by depositors, i.e. current account holders, saving depositors, call and other depositor. This ratio is computed by using the following formula:

$$\text{Cash and Bank Balance to Total Deposit Ratio} = \frac{\text{Total Cash \& Bank Balance}}{\text{Total Deposit}}$$

b. Cash Reserve Ratio (CRR)

Each bank has to keep the cash reserve ratio as directed by the NRB. The CRR ratio as per the NRB should be 5%. The cash reserve ratio is calculated by using the following formula.

$$\text{Cash Reserve Ratio} = \frac{\text{Cash Reserve at NRB}}{\text{Total Deposit}}$$

c. Fixed Deposit Total Deposit Ratio

Fixed deposit is a long-term and high interest bearing deposit. More fixed deposit may be an advantage if it can be invested in long-term credit. This ratio is calculated in order to find out the proportion of fixed deposit in total deposit. Fixed deposits are long-term deposit and banks can mobilize them on investment, loans and advances.

$$\text{Fixed Deposit to Total Deposit Ratio} = \frac{\text{Total Fixed Deposit}}{\text{Total Deposit}}$$

B) Profitability Ratio

Profit is the ultimate output of a company and its existence is not justified if it fails to make sufficient profit. Therefore the company should continuously evaluate the efficiency of the company in terms of profit. The profitability ratio is calculated to measure the operating efficiency of the company.

a. Net Profit Trend

The goal of each bank is to maximize profit. Thus, this analysis depicts the comparative efficiency of the banks in gaining highest profit. Obviously, the high profit is favorable.

b. Net Profit Margin to interest income

Net profit margin indicates margin of compensation left to the owners for providing their capital, after all expenses have met. It helps in determining the efficiency with which the affairs of the business are being managed. A net profit margin would enable the firm to withstand adverse economic conditions and low margin will have opposite implications.

$$\text{Net Profit Margin} = \frac{\text{NPAT}}{\text{Interest Income}}$$

c. Interest Income to Loan and Advances

The bank grants loan and advances for the sole reason to gain interest income. Thus, to examine how far the bank has been able to manage the loan and advances in earning interest income, the ratio of interest income to loan and advances has been determined.

$$\text{Interest Income to Loan and Advances} = \frac{\text{Interest Income}}{\text{Total Loan and Advances}}$$

d. Return on Shareholders' Equity

Return on shareholders' equity reflects how well the firm has used the resource of the owner's. The earning of satisfactory return is the most desirable objective of business as common or ordinary shareholders are entitled to the residual profits. It is calculated by dividing profit after tax by shareholders' equity.

$$\text{Return on Shareholders' Equity} = \frac{\text{NPAT}}{\text{Shareholders' Equity}}$$

e. Return on Total Assets Ratio (ROA)

Return on total assets explains the contribution of assets to generating net profit. This ratio indicates efficiency towards of assets mobilization. In other words return on total assets ratio is an overall profitability rate, which measures earning power and overall operation efficiency of a firm. This ratio helps the management in identifying the factors that have a bearing on overall performance of the firm.

$$\text{Return on Total Assets} = \frac{\text{NPAT}}{\text{Total Assets}}$$

f. Return on Total Deposit Ratio

Return on total deposit ratio measures how efficiently the deposits have been mobilized. It reveals the relationship between net profit after tax and total deposits. An explanation of the ability of management in efficient utilization of deposits, the ratio is calculated as;

$$\text{Return on Total Deposits Ratio} = \frac{\text{NPAT}}{\text{Total Deposits}}$$

g. Interest Earned to Total Assets Ratio

Interest earned to total assets ratio shows how much interest has been generated by mobilizing the assets in the bank. Higher ratio indicates higher efficiency in the mobilization of resources and ability of interest earning and vice-versa. The following formula is used to calculate this ratio.

$$\text{Interest Earned to Total Assets Ratio} = \frac{\text{Interest Income}}{\text{Total Assets}}$$

3.2.3.2 Statistical Tools.

Correlation Coefficient (r)

Correlation analysis in the statistical tools generally used to describe the degree which our variable is related to another. This tools is used for measuring the intensity or the magnitude of linear relationship between two variable X and Y is usually denoted by 'r' can be obtained as:

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

Where,

N = no of observation in series X and Y

$\sum X$ = Sum of observation in series X

$\sum Y$ = Sum of observation in series Y

$\sum X^2$ = Sum of square observation in series X

$\sum Y^2$ = Sum of square observation in series Y

$\sum XY$ = Sum of the product of observation in series X and Y

Coefficient of Determination (r²)

It explains the variation percent derived in dependent variable due to the any one specified variable; it denotes the fact that the independent variable is good predictor of the behavior of the dependent variable. It is square of correlation coefficient.

F.T-Test

To test the set hypothesis, t-test has been employed under Null Hypothesis (H), t-test statistic is:

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

Where, r = calculated value of correlation coefficient

n = no. of observation

The tabulated value two tailed test for 3 degree of freedom at 5% level of significant level is 3.182

Calculated value of $t \geq$ tabulated value of t, i.e. significant

Calculated value of $t \leq$ tabulated value of t, i.e. insignificant.

Multiple Regression Model

The MRA is an extension of Multiple Regression Analysis (MRA), in the sense that instead of single independent variable there are two or more independent variables.

Regression Model with k number of independent variables is

$$Y = b_0 + b_1X_1 + b_2X_2 + u \quad (1)$$

Where Y is dependent variable, X_1 and X_2 , are independent variables, u is an error term, b_0 is Y-intercept, and b_1, b_2, \dots, b_k are partial slope coefficients.

Y = Net Profit after tax (NPAT)

X_1 = Total loan and advances

X_2 = Total Deposit

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

This chapter stands for presenting and analyzing of data in order to achieve the formulated objectives. This section is classified into five different sub- sections. Among them, First section presents for the evaluation of the banks' liquidity position. Second section presents profitability position of the banks. Similarly, third section presents the evaluation of linear relationship between selected dependent and independent variables regarding profitability and liquidity of the banks. Likewise, the major findings are also drawn from the analysis.

4.1 Evaluation of Liquidity Position of the Bank

Under credit management liquidity position of the banks is very crucial and it is depicted as stated below.

4.1.1 Liquidity Ratio

Liquidity ratio measures the short-term solvency of a firm. The ratio is the crude measurement of liquidity position of a firm. The ability to pay the firm's short-term obligation is measured with the liquidity ratio.

4.1.1.1 Cash Reserve Ratio (CRR)

The Cash Reserve Ratio (CRR) is 4.5.0% for development banks. It shows whether the banks have complied with the NRB requirements or not. CRR of MNBBL and GBBL has been computed as follows.

Table 4.1

Cash Reserve Ratio in (%)

Fiscal Year	MNBBL	GBBL
2015/16	7.22	6.22
2016/17	5.12	6.22
2017/18	6.7	5.87
2018/19	7.16	4.06
2019/20	5.94	3.94

Noted from: Appendix I

The table 4.1 presents the cash reserve ratio of sample banks during the last five fiscal years. The cash reserve ratio of MNBBL is the highest of 7.22% and the least is 5.12% in 2015/16 and 2016/17 respectively. This indicates that the cash reserve ratio of sample banks is maintained as directed by NRB standard. I.e. to generate the liquidity. Similarly,

the cash reserve ratio of GBBL is the highest of 6.22% and the least is 3.94% in 2015/16 and 2016/17 and 2019/20 respectively. This ratio of both sample banks are in fluctuating trend .It is also shown in the following figure.

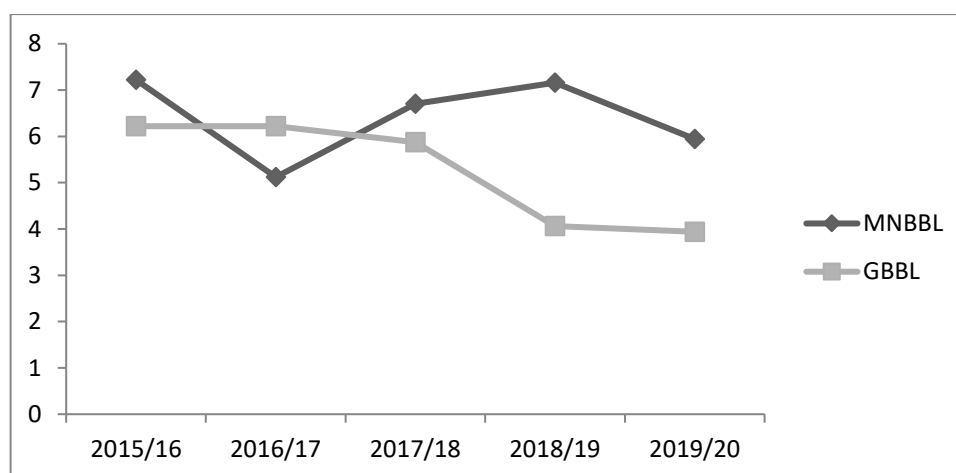


Figure 4.1 Cash Reserve Ratio of sample banks in (%)

As shown in the figure, this ratio of both sample banks is in fluctuating during the study period.

4.1.2 Total Loan/credit to Total Deposit Ratio:

This ratio indicates the capability of the banks to successfully utilize the total deposits on loans and advances for profit generating purposes. It measures how quickly the total deposits collected can be granted as loans and advances to earn reasonable returns.

Table 4.2

Total Loan and advances/credit to Total Deposit Ratio (in %)

Fiscal Year	MNBBL	GBBL
2015/16	87.83	86.77
2016/17	91.30	89.51
2017/18	82.07	88.83
2018/19	82.61	85.83
2019/20	80.94	77.77

Noted from: Appendix I & II

The table 4.2 presents the total loan and advances to total deposit ratio of sample banks. This ratio of MNBBL is the highest of 91.30% and the least is 80.94% in 2016/17 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 89.51% and the least is

77.77% in 2016/17 and 2019/20 respectively. This ratio of both sample banks is in slightly decreasing trend. This indicates that the total loan and advances to total deposit ratio is above the 80% which means both sample banks are failed to maintain as directed by NRB standard in overall.

Thus, higher ratio indicates the efficient and effective utilization of funds while lower ratio indicates the inefficiency of the banks to stop them from remaining idle. It is also presented in following figure.

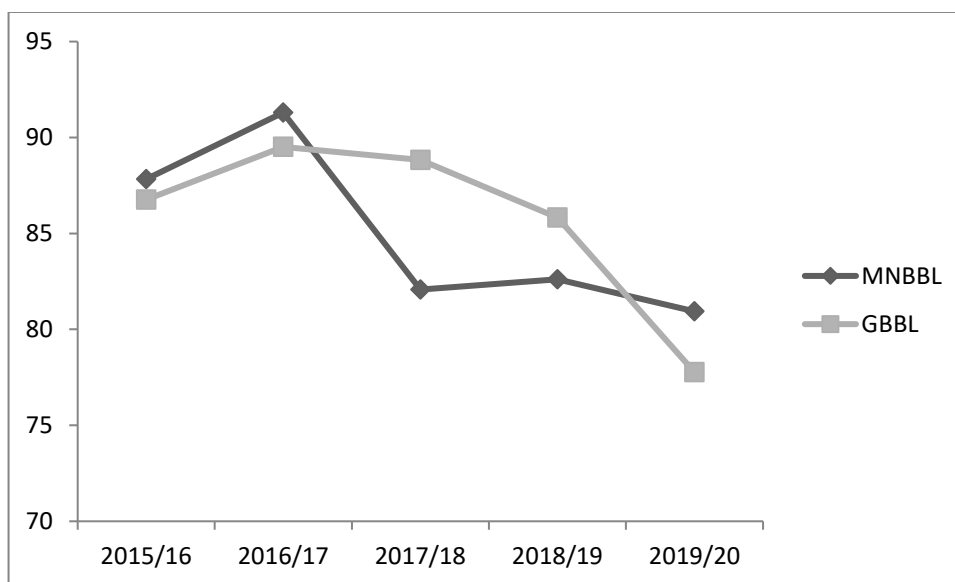


Figure 4.2 Total Loan/credit to Total Deposit Ratio (in %)

The figure 4.2 depicts the total loan/credit to total deposit ratio of sample banks for the last five fiscal years. This ratio of both banks is slightly reduced during the study period.

4.1.3 Credit Risk Ratio (non-performing loan to total loan and advances):

This ratio indicates the possibility of loan being default or not getting repaid by the client with subsequent losses to the bank. It is calculated as the percentage of nonperforming loans to total loans and advances/credit. Nonperforming loan also categorized as pass, substandard and doubtful loan. Higher ratio shows the presence of more risky assets in the volume of loans and advances and vice versa.

Table 4.3

Credit Risk Ratio of sample bank in (%)

FY	MNBBL	GBBL
2015/16	0.09	0.31
2016/17	0.02	0.24
2017/18	0.004	0.27
2018/19	0.07	0.20
2019/20	0.46	0.79

Noted from: Appendix I

The table 4.3 depicts the credit risk ratio of sample banks. This ratio of MNBBL is the highest of 0.46% and the least is 0.004% in 2019/20 and 2017/18 respectively. Similarly, this ratio of GBBL is the highest of 0.79% and the least is 0.20% in 2019/20 and 2018/19 respectively. This ratio of both sample banks is in slightly fluctuating.

From the five years analysis, the credit risk ratio of both banks is succeeded to maintain NRB directives under non-performing loan to total loan and advances. According to NRB directives NPL should not be more than 1% of total loan and advances for the sound credit performance and not more than 5% in general. Hence, both banks strongly meet the NRB standard to meet the NPL obligation. It is also presented in following figure.

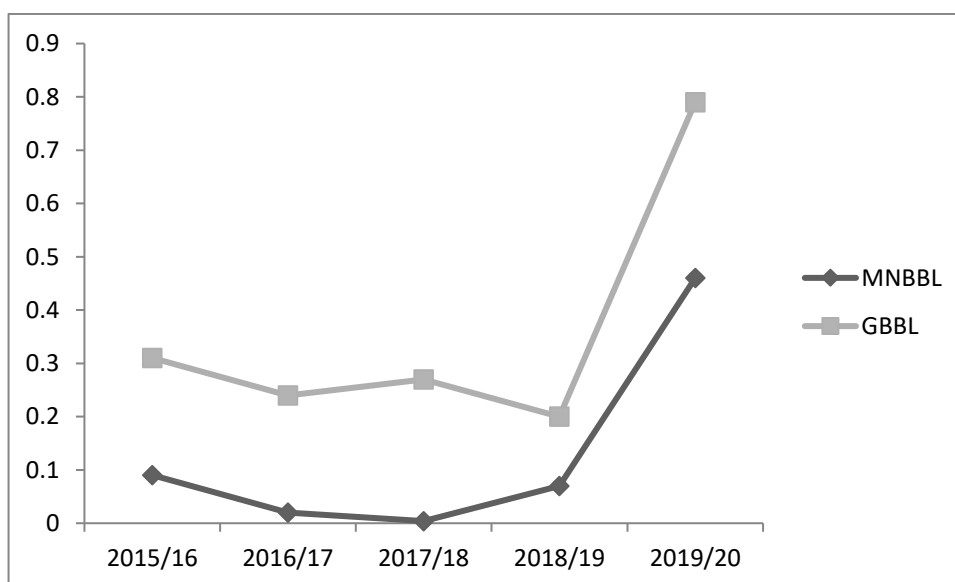


Figure 4.3 Credit Risk Ratio of sample banks in (%)

As shown in the figure, both banks are good performer in regards to credit risk .

4.2 Evaluation of Profitability Position of the Bank

Profitability refers to the operating efficiency of firms. The following ratio have been used for the measurement of the profitability position of the banks. These ratios have been presented and analyzed in this section comprehensively.

4.2.1 Return on Equity (ROE)

The ratio NPAT to equity capital refers operating efficiency of the banks. This ratio indicates return to equity. How much revenue is generated by utilizing the equity fund is an issue to be examined the ratios for the banks are fluctuating. It is also known as NPAT to book net worth ratio.

Table 4.4

ROE of Sample Banks in (%)

FY	MNBBL	GBBL
2015/16	26.88	18.42
2016/17	21.27	12.34
2017/18	17.21	14.81
2018/19	19.24	15.67
2019/20	12.16	13.28

Noted from : Appendix I & II

Table 4.4 presents the result of return on equity of the sample banks. ROE of MNBBL is the highest of 26.88% and the least is 12.16% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 18.42% and the least is 12.34% in 2015/16 and 2016/17 respectively. This ratio of both sample banks is in decreasing trend. It is also shown in the following figure.

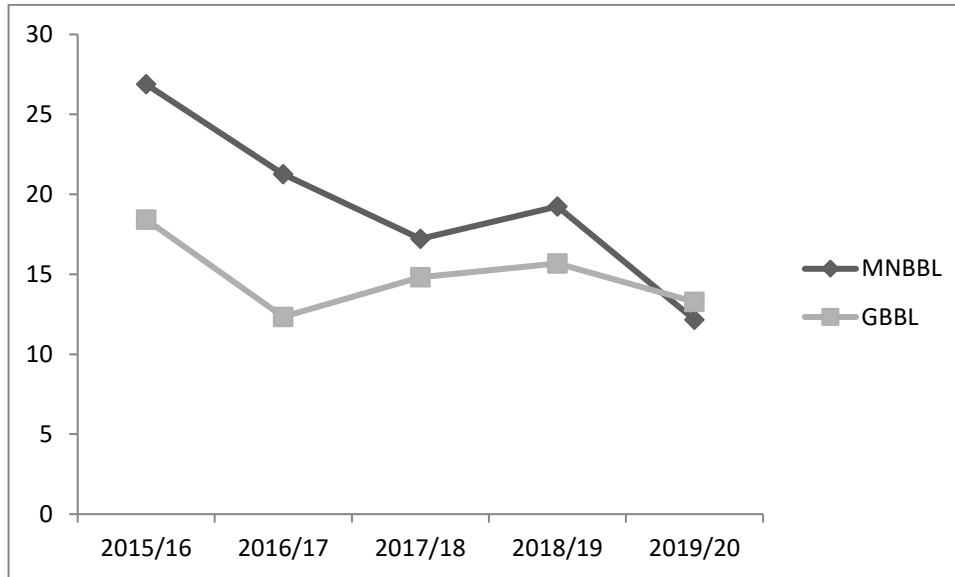


Figure 4.4 Return on Equity for the Sample Bank

Figure 4.2 presents the return on equity (ROE) for NIBL and NABIL. The ROE of both sample banks are in decreasing during the study period.

4.2.2 Return on Assets (ROA)

The NPAT to assets is calculated in order to know the effectiveness of investment on total assets with respect to net profit. Table 4.3 presents the return on assets for the banks.

Table 4.5

Return on Assets (ROA) of sample bank (%)

FY	MNBBL	GBBL
2015/16	2.79	0.02
2016/17	2.49	0.02
2017/18	1.80	0.02
2018/19	1.65	1.53
2019/20	1.07	1.15

Noted from: Appendix I & II

The table 4.3 presents the return on assets of the sample bank. ROA of MNBBL is the highest of 2.79% and the least is 1.07% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 1.15% and the least is 0.02% in 2019/20 and first three years respectively. The ROA of MNBBL is comparatively higher and better than GBBL. These ratios of both banks are in slightly fluctuating trend. It is also shown in the following figure.

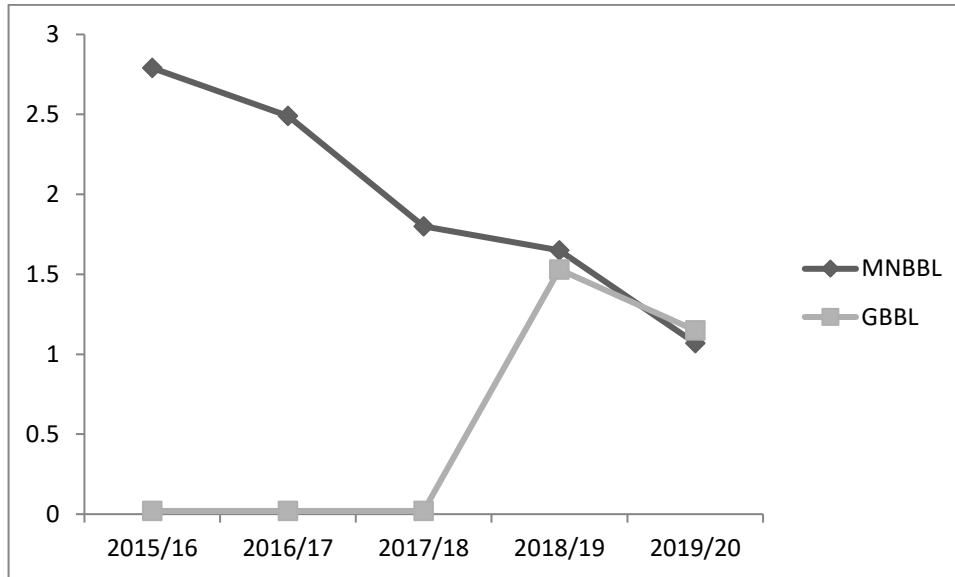


Figure 4.3 Return on Assets for the sample banks

The return on assets of both banks is slightly fluctuating during the study period as seen in the figure.

4.2.3 Net Profit to Total Deposit

Net profit to total deposit gauges the bank’s efficiency to generate net profits out of the total deposit collected. That means if the bank is able to make more profits from the deposit collected through the different sources.

Table 4.6

Net Profit to Total Deposit In (%)

FY	MNBBL	GBBL
2015/16	3.20	2.41
2016/17	2.90	2.53
2017/18	2.03	2.38
2018/19	1.85	1.20
2019/20	1.19	1.36

Noted from: Appendix I

The table 4.4 depicts the Net profit to total deposit gauges the bank’s efficiency to generate net profits out of the total deposit it is collected. The NPAT to TD of MNBBL is the highest of 3.20% and the least is 1.19% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 2.53% and the least is 1.20% in 2016/17 and 2018/19 respectively. This ratio of MNBBL is comparatively higher and better than GBBL. These ratios of both banks are in decreasing trend. It is also shown in the following figure.

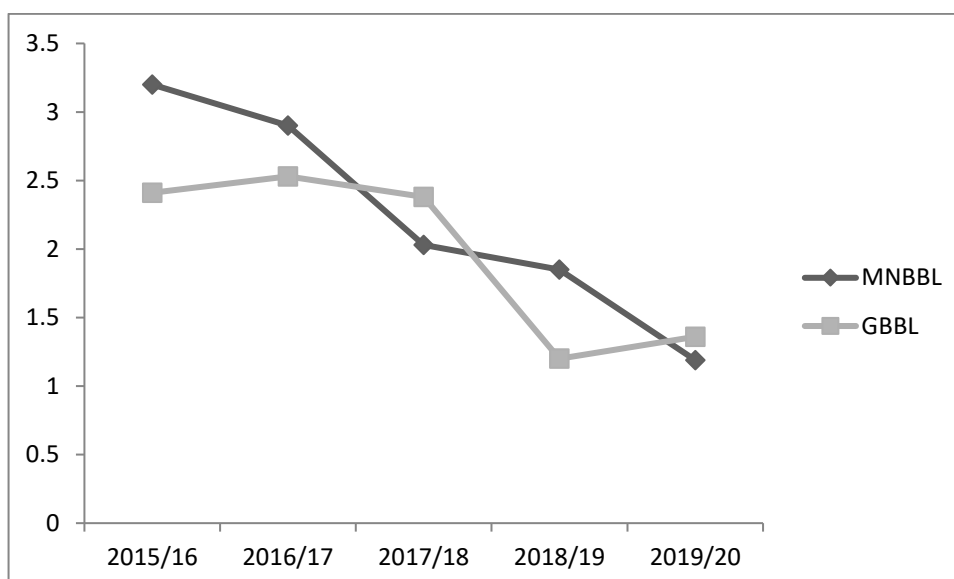


Figure 4.6 Net Profit to Total Deposit Ratio

The figure 4.4 depicts the net profit to total deposit ratio of sample banks for the last five years. This ratio is decreasing during the study period as shown in the figure.

4.2.4 Net Profit to Total loan and advances

Net profit to total loan and advances gauges the bank's efficiency to generate net profits. It is more clear from the following.

Table 4.7

Net Profit to Total loan and advances in (%)

FY	MNBBL	GBBL
2015/16	3.65	2.75
2016/17	3.18	2.69
2017/18	2.48	2.34
2018/19	2.24	2.09
2019/20	1.47	1.64

Noted from: Appendix I & II

The table 4.7 depicts the Net profit to total loan and advances gauges the bank's efficiency in order to generate the net profits. The NPAT to Total loan and advances ratio of MNBBL is the highest of 3.65% and the least is 1.47% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 2.75% and the least is 1.64% in 2015/16 and 2019/20 respectively. This ratio of GBBL is comparatively higher and better than MNBBL. This ratio of both banks is in decreasing trend. It is also shown in the following figure.

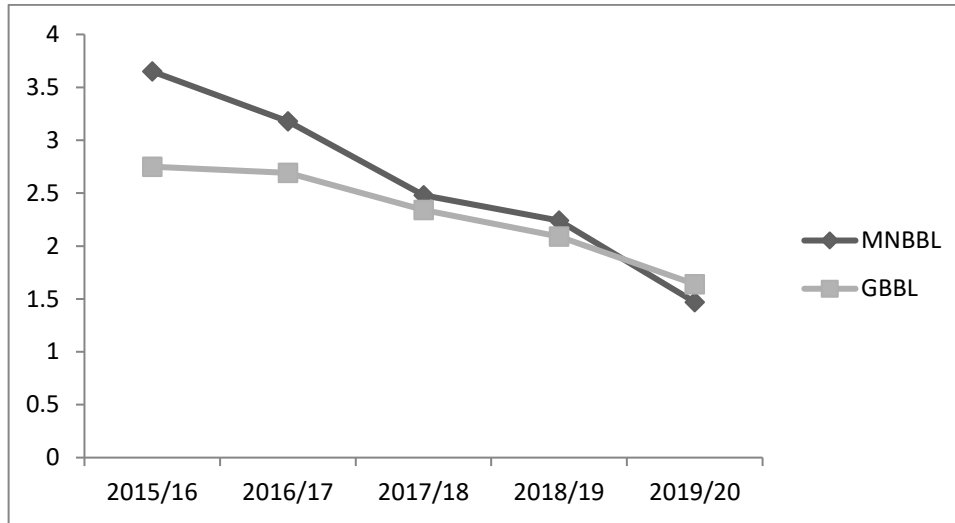


Figure 4.7 Net Profit to Total loan and advances in (%)

The figure 4.5 depicts the net profit to total loan and advances of sample banks. This ratio of both banks are in decreasing during the study period..

4.3.2 Interest Income to Total Loans and Advances Ratio:

This ratio indicates the capability of the banks to manage the loans and advances in earning higher interest income. It shows the proportion of interest income earned as compared to the total loans and advances granted.

Table 4.8

Interest Income to Total Loans and Advances Ratio in (%)

Fiscal Year	MNBBL	GBBL
2015/16	11.99	11.92
2016/17	12.42	12.48
2017/18	12.53	14.96
2018/19	13.42	12.92
2019/20	13.66	12.11

Noted from: Appendix I

The table 4.7 depicts the interest income to loans and advances ratio of sample banks during the last five fiscal years. The interest income to Total loan and advances ratio of MNBBL is the highest of 13.66% and the least is 11.99% in 2019/20 and 2015/16 respectively. Similarly, this ratio of GBBL is the highest of 14.96% and the least is 11.92% in 2017/18 and 2015/16 respectively. This ratio of both banks is in fluctuating trend. It is also presented in following figure.

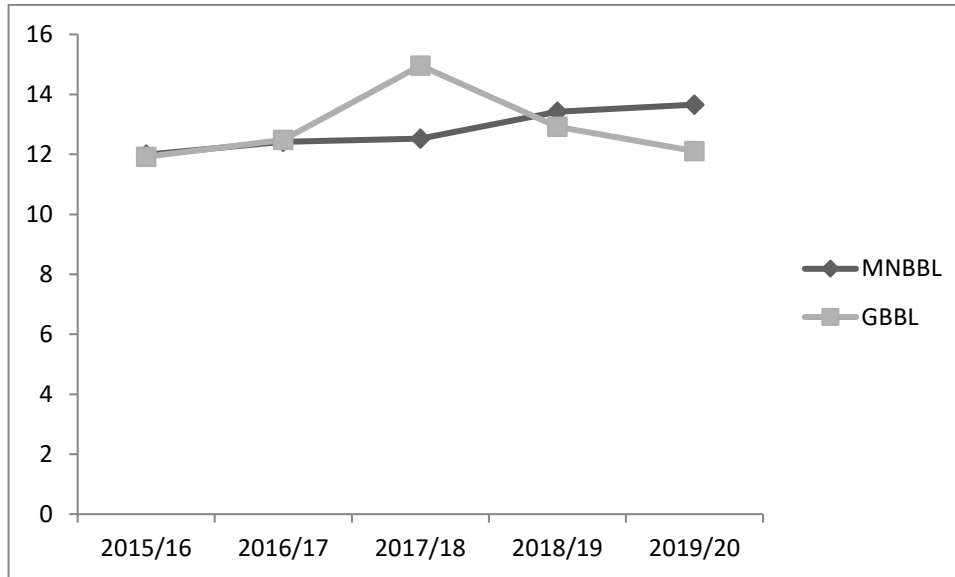


Figure 4.8 Interest Income to total Loans and Advances Ratio in (%)

The figure 4.7 shows the interest income to total loan and advances ratio of sample banks. This ratio of sample banks is in fluctuating trend for the both banks has shown in the figure.

4.4 Statistical Tools

The statistical analysis includes the calculation of correlation coefficients of different variables in order to find out the liquid assets trend of the respective development banks.

4.4.1 Relationship between Total loans & advances and Net Profit

The relationship between the total loans & advances with the net profit of the sample banks indicates how much credits granted has actually resulted in profit. In other words, it tries to analyze whether the total credit and net profit of the banks are moving in the same direction or not. The following table shows the correlation coefficient between the total credit and net profit denoted by 'r'. 'r²' indicates the coefficient of determination, t_{cal} and t_{tab} refers to calculated value of t- statistic and tabulated value of t-statistic at 5% level of significance at 3 degree of freedom two tailed test for respectively. The following results are worth highlighting.

Table 4.9

Correlation coefficient between Total Loan & advances and Net Profit

Banks	r	r²	t_{cal}	t_{tab}	Result
MNBBL	0.8607	0.7408	2.928	3.182	Insignificant
GBBL	0.9422	0.8877	4.871	3.182	Significant

Noted from: Appendix III

The table 4.9 clearly highlights that there is highly positive relationship between total loan and advances and net profit of MNBBL and GBBL. By testing t statistic, since calculated value (MNBBL) of t is 2.928 which is less than tabulated value of 't' at 5% significance level at 3 degree of freedom for two tailed test (3.182), there is no significant relationship between net profit and total loan and advances of MNBBL. Likewise, for the GBBL, their relationship is significant due to the greater calculated value of 't' than tabulated value at the same level of significance.

4.4.2 Relationship between the Total loans and advances and Total deposit

The relationship between the total credit (loans and advances) and total deposit is of great significance as it indicates the direction taken by the total credit with the changes in the volume of total deposit. The following table shows the correlation coefficient between the total credit and total deposits denoted by 'r'. 'r²' indicates the coefficient of determination, t_{cal} and t_{tab} refers to calculated value of t- statistic and tabulated value of t-statistic at 5% level of significance at 3 degree of freedom for two tailed test respectively. The following results are worth highlighting.

Table 4.13

Correlation coefficient between Total Loan and advances and Total Deposits

Banks	r	r²	t_{cal}	t_{tab}	Result
MNBBL	0.9996	0.9992	61.219	3.182	Significant
GBBL	0.9902	0.9805	12.281	3.182	Significant

Noted from: Appendix III

The table 4.13 depicts the relationship between the total Loan and advances and the total deposit of both banks are highly positive. Likewise, the calculated value t_{cal} of both sample banks are greater than tabulated value (61.219 and 12.281) is greater than tabulated value 3.182 at 5% significance level at 3 degree of freedom for two tailed test 3.182. It indicates that their relationship is significant.

4.2.2 Regression Analysis

The regression is used to determine the statistical relationship between two or more variable and to make predicates of one variable on the basis of the others. In this analysis multiple regression analysis has been done. In this analysis, Market Value Per Share (NPAT) as dependent variable and two independent variables are Total loan and advances (TL&Adv.) and Total deposit (TD). The availability of the data has been taken for the last five years.

NPAT on Total loan and advances (TL) and Total Deposit (TD) of MNBBL

Table 4.11

Regression equation of NPAT on TL and TD of MNBBL

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	231.724	218.145		1.062	.399
	TL_MNBBL	.087	.149	7.236	.586	.617
	TD_MNBBL	-.061	.118	-6.377	-.517	.657

Source: Appendix –III (by using SPSS)

The dependent variable NPAT with two independent variables TL and TD of MNBBL.

$$= b_0 + b_1 TL + b_2 TD$$

or

$$\hat{Y} = 231.724 + 0.087 b_1 - 0.061 b_2$$

The value of beta coefficient can be interpreted in the following manner.

b_1 = if the TL is increased by Rs 1, then NPAT of MNBBL is increased by Re 0.087 holding the values of TD is constant or fixed.

b_2 = if the TD is decreased by Rs 1, then NPAT of MNBBL is increased by Rs 0.061 holding the values of TL is constant or fixed.

By testing the beta significant test, among the two independent variables, both of them are insignificant (with the beta co-efficient) and dependent variable NPAT while testing t-statistic since p value (0.617 and 0.657) is more than 0.05 at 5% level of significance

NPAT on Total loan and advances (TL &adv.) and Total Deposit (TD) of GBBL

Table 4.12

Regression equation of NPAT on TL& adv. and TD of GBBL

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	131.175	28.414		4.617	.044
	TL_GBBL	.045	.008	3.164	5.360	.033
	TD_GBBL	-.027	.007	-2.244	-3.801	.063

Source: Appendix –III (by using SPSS)

The dependent variable NPAT with two independent variables TL and TD of MNBBL.

$$= b_0 + b_1TL + b_2 TD$$

or

$$\hat{Y} = 131.175 + 0.045 b_1 - 0.0271 b_2$$

The value of beta coefficient can be interpreted in the following manner.

b_1 = if the TL is increased by Rs 1, then NPAT of GBBL is increased by Re 0.045 holding the values of TD is constant or fixed.

b_2 = if the TD is decreased by Rs 1, then NPAT of GBBL is increased by Rs 0.045 holding the values of TL is constant or fixed.

By testing the beta significant test, among the two independent variables, NPAT with TL is significant since p value (0.03) is less than 0.05 whereas TD with NPAT is insignificant since p value (0.063) is more than 0.05 at 5% level of significance.

4.5 Major findings

The major findings of the study are depicted as under.

- The cash reserve ratio of MNBBL is the highest of 7.22% and the least is 5.12% in 2015/16 and 2016/17 respectively. This indicates that the cash reserve ratio of sample banks is maintained as directed by NRB standard. I.e. to generate the liquidity. Similarly, the cash reserve ratio of GBBL is the highest of 6.22% and the least is 3.94% in 2015/16 and 2016/17 and 2019/20 respectively. This ratio of both sample banks are in fluctuating trend .
- The total loan and advances to total deposit ratio of MNBBL is the highest of 91.30% and the least is 80.94% in 2016/17 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 89.51% and the least is 77.77% in 2016/17 and 2019/20 respectively. This ratio of both sample banks is in slightly decreasing trend. This indicates that the total loan and advances to total deposit ratio is above the 80% which means both sample banks are failed to maintain as directed by NRB standard in overall.
- The credit risk ratio of s MNBBL is the highest of 0.46% and the least is 0.004% in 2019/20 and 2017/18 respectively. Similarly, this ratio of GBBL is the highest of 0.79% and the least is 0.20% in 2019/20 and 2018/19 respectively. This ratio of both sample banks is in slightly fluctuating.
- From the five years analysis, the credit risk ratio of both banks is succeed to maintain NRB directives under non-performing loan to total loan and advances. According to NRB directives NPL should not be more than 1% of total loan and advances for the sound credit performance and not more than 5% in general. Hence, both banks strongly meet the NRB standard to meet the NPL obligation.
- ROE of MNBBL is the highest of 26.88% and the least is 12.16% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 18.42% and the least is 12.34% in 2015/16 and 2016/17 respectively. This ratio of both sample banks is in decreasing trend.
- ROA of MNBBL is the highest of 2.79% and the least is 1.07% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 1.15% and the least is 0.02% in 2019/20 and first three years respectively. The ROA of MNBBL is comparatively higher and better than GBBL. These ratios of both banks are in slightly fluctuating trend

- The NPAT to TD of MNBBL is the highest of 3.20% and the least is 1.19% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 2.53% and the least is 1.20% in 2016/17 and 2018/19 respectively. This ratio of MNBBL is comparatively higher and better than GBBL. These ratios of both banks are in decreasing trend.
- The NPAT to Total loan and advances ratio of MNBBL is the highest of 3.65% and the least is 1.47% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 2.75% and the least is 1.64% in 2015/16 and 2019/20 respectively. This ratio of GBBL is comparatively higher and better than MNBBL. This ratio of both banks is in decreasing trend.
- The interest income to Total loan and advances ratio of MNBBL is the highest of 13.66% and the least is 11.99% in 2019/20 and 2015/16 respectively. Similarly, this ratio of GBBL is the highest of 14.96% and the least is 11.92% in 2017/18 and 2015/16 respectively. This ratio of both banks is in fluctuating trend.
- There is highly positive relationship between total loan and advances and net profit of MNBBL and GBBL. By testing t statistic, since calculated value (MNBBL) of t is 2.928 which is less than tabulated value of 't' at 5% significance level at 3 degree of freedom for two tailed test (3.182), there is no significant relationship between net profit and total loan and advances of MNBBL. Likewise, for the GBBL, their relationship is significant due to the greater calculated value of 't' than tabulated value at the same level of significance.
- The relationship between the total Loan and advances and the total deposit of both banks are highly positive. Likewise, the calculated value t_{cal} of both sample banks are greater than tabulated value (61.219 and 12.281) is greater than tabulated value 3.182 at 5% significance level at 3 degree of freedom for two tailed test 3.182. It indicates that their relationship is significant.
- Under MNBBL, if the TL is increased by Rs 1, then NPAT of MNBBL is increased by Re 0.087 holding the values of TD is constant or fixed. Similarly, if the TD is decreased by Rs 1, then NPAT of MNBBL is increased by Rs 0.061 holding the values of TL is constant or fixed. By testing the beta significant test, among the two independent variables, both of them are insignificant (with the beta co-efficient) and dependent variable NPAT while testing t-statistic since p value (0.617 and 0.657) is more than 0.05 at 5% level of significance

- For GBBL, if the TL is increased by Rs 1, then NPAT of GBBL is increased by Re 0.045 holding the values of TD is constant or fixed. Similarly, if the TD is decreased by Rs 1, then NPAT of GBBL is increased by Rs 0.045 holding the values of TL is constant or fixed. By testing the beta significant test, among the two independent variables, NPAT with TL is significant since p value (0.03) is less than 0.05 whereas TD with NPAT is insignificant since p value (0.063) is more than 0.05 at 5% level of significance.

CHAPTER – V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary

Development Bank is the intermediary between the deficit and surplus of financial resources. Banks are under great pressure to meet the objectives of their stockholders, employees, depositors, and borrowing customers, while somehow keeping government regulators satisfied that the bank's policies, loans, and investments are sound. The majority of the needs of the stakeholders are related with the profitability of the banks. Thus, the foremost objective of the bank is to maximize the profit. As other types of business entity, commercial banks are also inspired by the profit. In this age of great competition, only the profitable banks can sustain for a long time. Financial policies of any concern are directly or indirectly influenced by its profitability. Thus, it is a base for a bank's survival, growth and expansion. This research 'Liquidity And Profitability Analysis Of Nepalese Development Bank: A Comparative Study Of Muktinath Bikash Bank Limited And Garima Bikash Bank Limited.' presents the financial position of the banks. Under it, liquidity, profitability position and credit management and credit risk have been analyzed.

Under Liquidity, The cash reserve ratio of MNBBL is the highest of 7.22% and the least is 5.12% in 2015/16 and 2016/17 respectively. This indicates that the cash reserve ratio of sample banks is maintained as directed by NRB standard. I.e. to generate the liquidity. Similarly, the cash reserve ratio of GBBL is the highest of 6.22% and the least is 3.94% in 2015/16 and 2016/17 and 2019/20 respectively. Similarly, The total loan and advances to total deposit ratio of MNBBL is the highest of 91.30% and the least is 80.94% in 2016/17 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 89.51% and the least is 77.77% in 2016/17 and 2019/20 respectively. This ratio of both sample banks is in slightly decreasing trend. This indicates that the total loan and advances to total deposit ratio is above the 80% which means both sample banks are failed to maintain as directed by NRB standard in overall. Similarly, The credit risk ratio of s MNBBL is the highest of 0.46% and the least is 0.004% in 2019/20 and 2017/18 respectively. Similarly, this ratio of GBBL is the highest of 0.79% and the least is 0.20% in 2019/20 and 2018/19 respectively. This ratio of both sample banks is in slightly fluctuating. From the five years analysis, the credit risk ratio of both banks is succeed to maintain NRB directives under non-performing loan to total loan and advances. According to NRB directives NPL should not be more than

1% of total loan and advances for the sound credit performance and not more than 5% in general. Hence, both banks strongly meet the NRB standard to meet the NPL obligation.

Under profitability, ROE of MNBBL is the highest of 26.88% and the least is 12.16% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 18.42% and the least is 12.34% in 2015/16 and 2016/17 respectively. This ratio of both sample banks is in decreasing trend. Similarly, ROA of MNBBL is the highest of 2.79% and the least is 1.07% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 1.15% and the least is 0.02% in 2019/20 and first three years respectively. The ROA of MNBBL is comparatively higher and better than GBBL. The NPAT to TD of MNBBL is the highest of 3.20% and the least is 1.19% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 2.53% and the least is 1.20% in 2016/17 and 2018/19 respectively. This ratio of MNBBL is comparatively higher and better than GBBL. These ratios of both banks are in decreasing trend. Likewise, the NPAT to Total loan and advances ratio of MNBBL is the highest of 3.65% and the least is 1.47% in 2015/16 and 2019/20 respectively. Similarly, this ratio of GBBL is the highest of 2.75% and the least is 1.64% in 2015/16 and 2019/20 respectively. This ratio of GBBL is comparatively higher and better than MNBBL. This ratio of both banks is in decreasing trend. Likewise, the interest income to Total loan and advances ratio of MNBBL is the highest of 13.66% and the least is 11.99% in 2019/20 and 2015/16 respectively. Similarly, this ratio of GBBL is the highest of 14.96% and the least is 11.92% in 2017/18 and 2015/16 respectively. This ratio of both banks is in fluctuating trend.

5.2 Conclusions

Under liquidity analysis, sample banks have maintained NRB directives. Under utilizing the fund, credit management, total loan and advances to total deposit of MNBBL has effectively utilized which is slightly higher than GBBL. Further, the capability of the both sample banks is successful to utilize the total deposits on loans and advances for profit generating purposes.

Similarly, the capability of the sample banks to manage the loans and advances in earning higher interest income. The average interest income to total loan and advances ratio of GBBL is slightly reducing during the study period. Under profitability, the return on equity investment for GBBL is slightly lower than MNBBL. Similarly, the return on assets of sample bank is satisfactory. Likewise, net profit to total loan and advances ratio for the bank is satisfactory i.e. to generate the profit. The credit risk ratio of MNBBL and GBBL is

less than 1%. Hence, MNBBL and GBBL both strongly meet NRB standard under NPL obligation. By testing t-test, there is significant relationship between total loan and advances and total deposit of both MNBBL and GBBL.

5.3 Recommendations

Following are some recommendations based on major findings of the study:

- Interest income to total deposit of the development banks is in reducing. Hence, both banks should focus on the interest generating investment by managing the portfolio of different sectors.
- Return on equity of both sample banks are also fluctuating and slightly reducing. Hence, both banks should increase it in order to motivate its shareholders and investors.
- Under credit deposit ratio both banks should follow the NRB directives. It means not cross the limit of 80% and recently up to 85%.
- Similarly, return on assets of sample banks is poor. Hence, both banks focus to upgrade it by making the portfolio investment in different sectors.
- Sample bank should utilize their deposit in long term return rather than short term return. For this, they should focus the deposit in productive sector which help to growth the national economic activities.

BIBLIOGRAPHY

Books,

- Duke, S.A. (2010). *Trade credit, quality guarantees, and product marketability Management* New Delhi : Mac. Graw- Hill Publishing Ltd.
- Firoj, J.C. (2010). *Profitability And Liquidity Management* New York: McGraw Hill Publishing Company Ltd.
- Fisher, E. (2010) *Security Analysis and Portfolio Management*, Sixth Edition, New Delhi: Prentice Hall of India Pvt Ltd.
- Hornby, N.(2000). *Investment*. New York: The Dryden Press.
- Khadka, L.P. (2008). *Origin of Banks in Nepal*. Pokhara: Rara Publication, Pvt. Ltd.
- Klise, L. (2004). *Efficiency of working capital management and corporate profitability* New Delhi: Prentice Hall of India Private Ltd. Vol.8, 37-45.
- Kulkarni, M. (1985). *Effects of working capital management on SME profitability. International Journal of Managerial Finance*, 2, 164-177.
- Ojha, J.C. (2005). *History of Nepalese Commercial Banks*. Biratnagar: Ratna Vidya Sadan.
- Pant, P.R. (1979). *A Handbook of Research Methodology and Thesis Writing*. Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd.
- Ross, S. (2002). *Money and capital markets*. New York : McGraw Hill, Irwin.
- Singh, H.(2005). *Banking and insurance*. Kathmandu: Asia Publications Pvt. Ltd.

Journal and Periodicals

- Hakuduwal, K. (2014). Impact of Internal Factors on Profitability of Nepalese Finance Companies. *The KIC Journal of Management and Economic Review* Vol. 1(2): 88-97.
- Mathuva, D. (2009). The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. *Research Journal of Business Management*, Vol.3, 1-11p.
- Moussa, M. A. B. and Boubaker, A. (2020) The Impact of Liquidity on Bank Profitability: Case of Tunisia. *European Journal of Accounting, Auditing and Finance Research*, 8(2),20-37.

- Muhammad, I. (2017). Impact of Liquidity Management on Profitability in the Pakistani Commercial Banks. *Research Journal of Business* 17 (1): 52-58.
- Ogunayo, I. and Adeyemi, N. (2015). *Causal Relationship between Liquidity and Profitability of Nigerian Deposit Money Banks. African Journal of Business Management*, 12(2) : 76-89.
- Sayers, O.T. (2009). Liquidity management and corporate profitability: evidence from panel data analysis of selected quoted companies in Nigeria. *Research Journal of Business*, Vol.3, 73-84p.
- Sthapit, A. and Maharjan, G. (2012). Impact of Liquidity Management on Profitability: A Comparative Study between NABIL and SCBN. *Lumbini Journal of Business and Economics*, 2(2),50-69.

Unpublished Dissertation

- Khanal, N. (2016). *Comparative study on Liquidity management of Everest Bank Ltd and Himalayan Bank Ltd*. Kathmandu: An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.
- Kharel, P. (2019). *Liquidity Management of Commercial Banks of Nepal (with reference to NABIL and SBI)*. Kathmandu: An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.
- Maharjan, P. (2015). *Profitability Analysis of commercial Banks (A case study of Rastriya Banijya Bank And Nepal Bank Ltd.)*. Kathmandu: An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.
- Pandey, S. (2019). *Liquidity and Profitability Analysis of Standard Chartered Bank Nepal Ltd. and NABIL Bank Ltd*. Kathmandu : An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.
- Rouniyar, D.P. (2018). *Liquidity & profitability Analysis of Listed of Four Commercial Banks (with reference to NABIL, SCBNL, EBL and SBI)*. Kathmandu : An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.
- Shrestha, R. (2017) *Comparative credit management of Nepalese commercial banks (with reference to NIBL and BOK)*. Kathmandu: An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.

Shrestha,S. (2019). *Credit Risk Management of Joint Venture Banks (with reference to EBL and SBI)*. Kathmandu : An Unpublished Master's thesis, Faculty of Management, Tribhuvan University.

Website

www.garimabank.com.np

www.muktinathbank.com.np

www.nrb.org.np

www.sebonp.com

APPENDICES

Appendix-I

Summary of the Financial Transactions of Muktinath Bikash Bank (MNBBL) from FY 2015/16 to 2019/20

(NPR in millions)

Details	2015/16	2016/17	2017/18	2018/19	2019/20
Total Deposit	11277	16775	30669	46176	59366
Total Loans & Advances	9799	15159	25169	38144	48264
Cash and Bank balance	1098	1909	7035	10244	10218
Non Performing loan	9.10	2.88	27		224
Total assets	12937	19592	34766	51991	66348
Net Profit After Tax	361	487	624	856	707
Shareholder fund	1124	1978	2592	3065	4325
Interest income	1175	1882	3154	5118	6592

Source: Annual Reports of MNBBL

Fiscal Year	2015/16	2016/17	2017/18	2018/19	2019/20
financial highlight					
CRR (in %)	7.22	5.12	6.7	7.16	5.94
TL/credit to Total deposit (in %)	87.83	91.30	82.07	82.61	80.94
Credit risk (NPL to TL and Adv./ credit)(in %)	0.09	0.02	0.004	0.07	0.46
ROE (in %)	26.88	21.27	17.21	19.24	12.16
ROA (in %)	2.79	2.49	1.80	1.65	1.07
NPAT to total Deposit (in %)	3.20	2.90	2.03	1.85	1.19
NPAT to TL and adv./credit(in %)	3.65	3.18	2.48	2.24	1.47
Interest income to TL and Adv.(in %)	11.99	12.42	12.53	13.42	13.66

Source: Annual Reports of MNBBL

Summary of the Financial Transactions of Garima Bkash Bank from FY 2015/16 to 2019/20

(NPR in millions)

Details	2015/16	2016/17	2017/18	2018/19	2019/20
Total Deposit	9228	13802	19728	29762	42433
Total Loans &Advances	7909	12894	18707	28438	35144
Cash and Bank balance	885	4315	5683	7672	8728
Non Performing loan	24.55	30.56	50.70	56.88	138
Total assets	10578	17694	25286	38749	50293
Net Profit After Tax	222	349	469	594	577
Shareholder equity	1205	2828	3167	3791	4346
Interest income	844	1508	2471	3675	4734

Source: Annual Reports of GBBL

Fiscal Year	2015/16	2016/17	2017/18	2018/19	2019/20
financial highlight					
CRR (in %)	6.22	6.22	5.87	4.06	3.94
TL/credit to Total deposit (in %)	86.77	89.51	88.83	85.83	77.77
Credit risk (NPL to TL and Adv./ credit)(in %)	0.31	0.24	0.27	0.20	0.79
ROE (in %)	18.42	12.34	14.81	15.67	13.28
ROA (in %)	0.02	0.02	0.02	1.53	1.15
NPAT to total Deposit (in %)	2.41	2.53	2.38	1.20	1.36
NPAT to TL and adv./credit(in %)	2.75	2.69	2.34	2.09	1.64
Interest income to TL and Adv.(in %)	11.92	12.48	14.96	12.92	12.11

Source: Annual Reports of GBBL

Cash Balance include: Cash Balance, Balance with NRB, Balance with Banks/other financial institutions.

Appendix_-II

Calculation of Correlation coefficient between variables

MNBBL

FY	TL&Adv.(X)	NPAT (Y)	XY	X2	Y2
2015/16	9799	361	3537439	96020401	130321
2016/17	15159	487	7382433	229795281	237169
2017/18	25169	624	15705456	633478561	389376
2018/19	38144	856	32651264	1454964736	732736
2019/20	48264	707	34122648	2329413696	499849
SUM	136535	3035	93399240	4743672675	1989451

$$\text{Correlation coefficient, } r = \frac{n\sum XY - \sum X \sum Y}{\sqrt{n\sum X^2 - (\sum X)^2} \cdot \sqrt{n\sum Y^2 - (\sum Y)^2}}$$

$$r = 0.8607$$

	r	r²	t_{cal}	t_{tab}	Result
MNBBL	0.8607	0.7408	2.928	3.182	Insignificant

$$\text{Coefficient Determinants, } r^2 = (0.29)^2 = 0.0864$$

For t-test

Null hypothesis H₀: There is no significance difference between TL and total NPAT of MNBBL or the variables are uncorrelated.

Alternative hypothesis H₁ There is significance difference between TL and total NPAT of MNBBL or the variables are correlated.

Under H₀, the t statistic is:

Calculation of t statistic:

$$t = \frac{r}{\sqrt{1-r^2}} \times \sqrt{n-2}$$

$$t = 2.928$$

$$\text{Degree of freedom} = 5 - 2 = 3$$

Tabulated/Critical value:

At 3 degree of freedom for two tailed test at 5% level of significance tabulated value of $t_{0.05, 3d.f.} = 3.182$

Decision: since calculated value of t is less than tabulated value of t H_1 is rejected and H_0 is accepted. Hence, there is no **significance difference** between TL and NPAT **or the variable are uncorrelated.**

(**Decision:** if Calculated t is less than tabulated t H_0 is accepted and if calculated t is greater than tabulated t H_0 is rejected i.e. accept H_1 . **Note:** similar method has been applied for the calculation of others).

The value are directly put in analysis chapter.

GBBL

FY	TL&Adv.(X)	NPAT (Y)	XY	X2	Y2
2015/16	7909	222	1755798	62552281	49284
2016/17	12894	349	4500006	166255236	121801
2017/18	18707	469	8773583	349951849	219961
2018/19	28438	594	16892172	808719844	352836
2019/20	35144	577	20278088	1235100736	332929
SUM	103092	2211	52199647	2622579946	1076811

MNBBL

FY	Total loan & adv.(X)	Total deposit (Y)	XY	X2	Y2
2015/16	9799	11277	110503323	96020401	127170729
2016/17	15159	16775	254292225	229795281	281400625
2017/18	25169	30669	771908061	633478561	940587561
2018/19	38144	46176	1761337344	1454964736	2132222976
2019/20	48264	59366	2865240624	2329413696	3524321956
SUM	136535	164263	5763281577	4743672675	7005703847

GBBL

FY	Total loan & adv.(X)	Total deposit (Y)	XY	X2	Y2
2015/16	7909	9228	72984252	62552281	85155984
2016/17	12894	13802	177962988	166255236	190495204
2017/18	18707	19728	369051696	349951849	389193984
2018/19	28438	29762	846371756	808719844	885776644
2019/20	35144	42433	1491265352	1235100736	1800559489
SUM	103092	114953	2957636044	2622579946	3351181305

Appendix-III

Regression analysis of sample banks

MNBBL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.878	.771	.543	129.72314

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	231.724	218.145		1.062	.399
	TL_MNBBL	.087	.149	7.236	.586	.617
	TD_MNBBL	-.061	.118	-6.377	-.517	.657

GBBL

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.993	.986	.973	26.01228

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	131.175	28.414		4.617	.044
	TL_GBBL	.045	.008	3.164	5.360	.033
	TD_GBBL	-.027	.007	-2.244	-3.801	.063