# A STUDY ON FINANCIAL PERFORMANCE ANALYSIS OF FEWA FINANCE LIMITED IN THE FRAMEWORK OF CAMELS

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RECOMMENDATION

This is to certify that the thesis:

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# **VIVA-VOCE SHEET**

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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 degree of

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# **TABLE OF CONTENTS**

Ackn	nowledgements	rag
List	of Table	
List	of Figure	
Abbi	reviation	
Cha	pter I: INTRODUCTION	
1.1	General Background	1
1.2	Focus of the Study	4
1.3	Statement of the Problem	5
1.4	Objectives of the Study	6
1.5	Significance of the Study	6
1.6	Limitation of the Study	7
1.7	Organization of the Study	7
Cha	pter II: REVIEW OF LITERATURE	
2.1	Conceptual Review	9
2.2	Research Review	45
2.3	Research Gap	53
Cha	pter III: RESEARCH METHODOLOGY	
3.1	Research Design	55
3.2	Population and Sample	56
3.3	Nature and Sources of Data	56
3.4	Data Collection Procedures	56
3.5	Data Processing	57
3.6	Data Analysis Tools	57
3.7	Limitation of the Methodology	69
Cha	pter IV:DATA PRESENTATION AND ANALYSIS	
4.1	Data Presentation and Analysis	70
4.2	Major Findings of the Study	102
Cha	pter V: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	
5.1	Summary	106
5.2	Conclusions	108
5.3	Recommendations	111

BIBLIOGRAPHY APPENDICES

# List of Tables

Table		
4.1	Core Capital Adequacy Ratio	71
4.2	Supplementary Capital Adequacy Ratio	73
4.3	Capital Adequacy Ratio	74
4.4	Ratio of classified loan of FFL	77
4.5	Loan Loss Provision Ratio	79
4.6	Total Expense to Total Income Ratio	81
4.7	Earning Per Employee	83
4.8	Return on Equity	85
4.9	Return on Assets	87
4.10	Net Interest Margin	88
4.11	Earning per Share	90
4.12	Liquid Assets to Total Deposit Ratio	92
4.13	NRB Balance to Total Deposit Ratio	94
4.14	Cash in Vault to Total Deposit Ratio	95
4.15	GAP Analysis	97

# List of Figures

Figure		
4.1	Comparing Core Capital Adequacy ratio with NRB Standard	72
4.2	Comparing Supplementary Capital Adequacy Ratio to NRB	
	Standard	74
4.3	Comparing Capital Adequacy with NRB Standard	75
4.4	Trend of Loan Loss Provision Ratio	80
4.5	Trend of Total Expense to Total Income Ratio	82
4.6	Trend of Earning Per Employee	84
4.7	Trend of Return on Equity	86
4.8	Trend of Return on Assets	87
4.9	Trend of Net Interest Margin	89
4.10	Trend of Earning Per Share	90
4.11	Comparing Liquid Assets to Total Deposit Ratio with	
	Industrial Average	93
4.12	Comparing NRB Balance to Total Deposit Ratio with	
	Industrial Average	95
4.13	Comparing Cash in Vault to Total Deposit Ratio with	
	Industrial Average	96
4.14	Level of Risk Sensitive Assets, Liabilities and CGAP	
	Ratio over time	101

# Abbreviations

AEA	Average Earning Asset
ATM	Automated Teller Machine
BAFIA	Bank and Financial Institution Act
BCBS	Basel Committee on Banking Supervision
BFIs	Bank and Financial Institutions
BIS	Bank for International Settlement
C.V.	Coefficient of Variation
CAR	Capital Adequacy Ratio
CCAR	Core Capital Adequacy Ratio
CVTDR	Cash in Vault to Total Deposit Ratio
EPE	Earning Per Employee
EPS	Earning Per Share
FFL	Fewa Finance Limited
FI	Financial Institution
IAR	Industry Average Ratio
LATDR	Liquid Assets to Total Deposit Ratio
LLP	Loan Loss Provision
MFIs	Micro Finance Institutions
MIS	Management Information System
NII	Net Interest Income
NIM	Net Interest Margin
NPA/NPL	Non-Performing Asset / Non-Performing Loan
NPAT	Net Profit After Tax
NRB	Nepal Rastra Bank
NRBBTDR	NRB Balance to Total Deposit Ratio
ROA	Return on Assets
ROE	Return on Equity
RSA	Rate Sensitive Assets
RSL	Rate Sensitive Liabilities
SCAR	Supplementary Capital Adequacy Ratio
SD	Standard Deviation
T.U.	Tribhuwan University
TETIR	Total Expenses to Total Income Ratio

## **CHAPTER I**

# INTRODUCTION

#### **1.1 General Background**

Economic development is the backbone of the development of a nation. The economic development of Nepal is backward in comparison to other developed and developing countries. For the purpose of development of country, many business houses and companies are being established under different acts. Economic development is a challenging task in Nepal not just due to lack of resources but it is also due to lack of proper utilization of the available resources in efficient manner. In the economic development of a country, financial institution can be considered as a catalyst. The development process of a country involved the mobilization and development of resources. The financial sector occupies a very important place in the country's economy, acting as an intermediary to all industries, ranging from agriculture, construction, textile, manufacturing, and so on. The financial sector thus contributes directly to national income and its overall growth. As the financial sector has a major impact on the economy as a whole, evaluation, analysis, and monitoring of its performance is very important.

Finance refers to the managerial activity concerned with raising of fund/capital from various sources and their utilization in the productive sector. Finance is the main means for mobilization of the funds. It involves the method of acquiring, allocation and managing the funds. It converts the

accumulated funds i.e. saving into productive uses. It is related with arrangement of cash and credits so that the firm may have means to carry out its objectives as satisfactory as possible.

Bank and Finance companies are financial institutions that are established to make profit and perform monetary transaction. They are inevitable elements of financial market, which acts as a mediator between those who have money and who need money. On one condition of providing interest, it accepts deposits from depositors. It provides loan to people and institutions on the condition of certain amount of interest having equivalent pledge. On the other hand, it takes responsibilities of saving customers deposits; on the other hand, it fulfills the necessary loan to entrepreneurs, farmers and public who need.

Finance companies are those intermediaries which link the savers and users of capital. They collect small and scattered saving of the individuals and mobilize it in the productive sectors in the form of investment or loan. Finance companies are financial intermediaries that accept time deposits and advance loans to the individuals, firms, companies or institution for agriculture as well as non-agriculture purpose in order to increase economic activities. Finance companies are the market maker, investigators and sue of money market and capital market.

On the other hand, liberalization and globalization world has made the financial sectors more complex and potentially riskier. It has pressured new challenges to supervisors on structuring of their ongoing supervision. In response, the supervisors have developed new methods and process for monitoring and assessing FIs on and ongoing basis. The financial condition

of overall financial sector depends on the financial condition of individual financial institutions. Various internal and external factors affect those FIs. Thus, the financial condition of FIs should be regularly checked up.

Financial condition means financial performance of the banks and financial institutions. Financial performance as a part of financial management is the main indicator of success or failure of every enterprise. It can be considered as a heart of the financial decision. Rational evaluation of performance of a bank and financial institutions is essential to prepare sound financial policies and to attract potential investors. Stakeholders like owners, managers, creditors, customers, tax authorities are directly interested towards the financial health and analysis of financial position of banks and financial institutions. Not only the commercial banks but also any financial institutions require regular analysis of financial condition to maintain the confidence of private sectors in financial system of a country and protect the interest of depositors, lenders, shareholders and other stakeholders.

Financial analysis is the process of analyzing various items of financial statement of a firm to ensure its comparative strength and weakness. Performance analysis of any firm can be ascertained from financial analysis. Financial statement analysis involves comparing the firm's performance with that of other firm in the same industry and evaluating trends in the firm's financial position over time. The use of financial analysis helps manager to identify deficiencies and take action to improve performance.

CAMELS is one of the widely used FI rating system. It is a technique for rating the FIs by analyzing their financial performance in terms of six major components (Capital Adequacy, Assets Quality, Management Quality, Earnings, Liquidity and Sensitivity to Market Risk). It identifies the problematic FIs as well as critical areas within the FI. Based on the outcomes of CAMELS, individual FIs can improve their performance.

Fewa Finance Company is a national level finance company in Nepal. Which was established in 2060 B.S.as a fourth finance company based on Pokhara. Currently it has authorized capital of NRs.700 million and issued and paid up capital are NRs.300.30 million each. At present, FFL has been providing services to rural and urban areas of the country via its 13 branches including head office.

#### **1.2 Focus of the Study**

This research study is focused on the analysis of financial condition and the performance of the Fewa Finance Ltd. in the framework of internationally recognized banking institution system known as CAMELS, which stands for Capital adequacy, assets quality, management efficiency, earning performance, liquidity and sensitivity to market risk. The study will focus the trend of capital adequacy ratios, non performing loan composition, earning per employee, total expenses to revenue ratio, return on equity, return on assets, net interest margin, earning per share and liquidity with respect to industry average ratio and NRB standard during the period of the last five years starting from FY2064/65 to 2068/69.

#### **1.3 Statement of the Problem**

During the era of arm-chair banking, the banks and financial institutions were very few and people had no other option than follow the rules of the few banks which were serving the customers and investors had limited options to invest their money. But the current scenario has changed. Nepalese banks and finance companies are operating in the competitive environment. In this situation, bank and finance companies have to adopt suitable strategies for the existence. They should balance and coordinate the different functional areas of business concern. An FI having sound financial position can satisfy its clients, employees, government and other stakeholders and can attract additional depositors and investors. The success or failure of any organization depends on its strategy. Thus, it is necessary to disclose the real financial position of the FI so that FI can formulate proper strategy to extend its strong parts and to correct its weak part ensuring its stakeholders about the financial soundness of the bank. On the other hand, the financial position drawn out releases supervisory information to verify the bank report accuracy and to maintain financial discipline of the bank. The basic problem of this research is to present the financial performance of FFL in the framework of CAMELS. In addition, specific problems are expressed as follows.

- What is the position of capital adequacy ratio of FFL?
- What is the quality of assets of FFL?
- How efficiently the management of company is maintaining its expenses with respect to incomes?
- What is the trend of earning performance of FFL?
- What is the trend of liquidity position?

• How can changes in interest rate affect FFL's earnings?

# 1.4 Objectives of the Study

Each and every research study conduct with a view of achieving some objectives and the study is of no exception. The main objective of the study is to examine and analyze the financial performance of Fewa Finance Ltd. The specific objectives of this study are as follows:

- To examine the capital adequacy ratio of FFL.
- To analyze the quality of assets of FFL.
- To evaluate the expenses to income ratio of FFL.
- To study the trend of earning performance made by FFL.
- To measure the liquidity position of FFL.
- To assess the sensitivity of FFL's earning to interest rate risks.

# 1.5 Significance of the Study

The significance of the study lies mainly in filling a research gap on the study of financial performance analysis of finance companies with respect to Fewa Finance Ltd. It contributes significantly to solve the problem existing in the financial institutions and which can provide direction to the management for appropriate decision making, formulating the policy and strategies to maintain activities effectively. Mainly, the study is important for the researcher to fulfill the academic requirement of Master's Degree. On the other hand, it is important for researcher, scholars, investors, students and many other parties. So, this study will be helpful to those who want to study about this field in further detail.

#### **1.6 Delimitation of the Study**

- This study is basically based on secondary data collected from annual report and financial statements.
- The study has covered only five years period (i.e. from F/Y 2064/65 to 2068/69).
- The study is concerned about financial performance analysis of Fewa Finance Ltd. so the conclusion drawn from the study may not be relevant to other finance companies.
- The qualitative and external variables that affect the performance of the FFL is not considered in the study.

#### **1.7 Organization of the Study**

The study has been organized into five chapters.

**Chapter I :** It is introduction chapter, which provide general background of the study. Thus it includes background, focus of the study, statement of the problem, objectives, significance and delimitation of the study.

**Chapter II :** This chapter critically reviews the relevant literature for the study. It examines the history of the study and shows theoretical and conceptual debate about the study.

**Chapter III :** It describes in detail the methodology taken to carry out the study. So, this chapter clearly shows the research design, sources of the data and technique used in the study.

**Chapter IV :** This chapter is the backbone of the whole study as it includes collection of the data, analyzing those using different tools and techniques and also this chapter includes presenting them in crystal view. Major findings of the study present at the end of this chapter.

**Chapter V :** This is the conclusion chapter of the study, which summarize major findings of the study and gives conclusion and recommendations after scanning the problems of the study. It also deals with general recommendations.

# CHAPTER II

# **REVIEW OF LITERATURE**

To make the research more realistic, review of literature is required. In this chapter, review of various literatures has been done to clarify the concept of the topic as well as to examine the previous studies made by various researchers in the field of financial performance analysis of FIs. It provides significant knowledge in the field of research. Thus the review of books, research studies, articles and journals has been used to make clear. This chapter is divided into two parts. Conceptual review and research review.

#### **2.1 Conceptual Review**

#### **2.1.1 Concept of Finance Company:**

The modern economics dictionary defines a finance company as "A financial intermediary not a bank which may obtain fund from its own capital resources by accepting deposits (usually for fixed periods) or even by borrowing from other institutions which it lends for variety of purpose, especially to finance as per the demand of the customers." Finance company plays a vital role in developed and under-developing countries. According to Shrestha and Bhandari (2004), finance companies are the non-banking financial institutions that tend to meet the various kinds of consumer credit needs. In a situation when the existing financing institutions, especially commercial banks are unable to supply credit timely and carry capital market activities, finance companies have come timely to meet the individual credit needs, undertake merchant banking functions and other allied functions. The especial feature of finance companies is that they go to such areas where commercial banks find difficult and not accessible to lend with risk. Most of the customers prefer finance companies with the notion that taking loan from finance companies

although little bit costly is confident in getting the loan without passing too many procedures often that exist in commercial banks. They stresses that the finance companies are the non-banking financial institutions operating in the overall financial system of the economy. However, they serve as they act as the borrowing and lending financial institutions with additional financial risk taking management. The interest rate provided by finance companies are comparatively higher than the banks, which is main attraction through which they successfully collect deposits. The comparative rates are also comparatively higher than the banks. Earlier, finance companies were allowed to collect deposits only on fixed deposit account, but this barrier is removed in 2003 to make it competitive and allowed it to collect deposits in saving and current account also (Gurung, 2010).

#### 2.1.2 Finance Companies in Nepal

Finance Companies Act in 1984 allowed the inception of finance companies, after allowing merchant banking activities in 1992; the only significant change in operations commencing in 2004 with the Banks and Financial Institutions Act (BAFIA). Finally, finance companies, in addition to the limited activities were allowed to be a member of the check clearing house, transact in Indian Currency and were authorized to transact in real estate business. Subsequent directives in 2005 allowed finance companies to be able to provide debit and credit cards by being a subsidiary member of a bank. Finance companies henceforth were expected to follow all prudential regulations that commercial banks were following. One of the biggest changes, after the Umbrella Act came into operation, was on the balance sheet of finance companies which were now to follow cash based accounting system as opposed to accrual based in the past along with strict provisioning and interest suspense allocations. In turn, the effect on the balance sheet, the first year for a majority of companies was considerable. The stringent reporting requirements also compelled them to upgrade their technology to be in compliance with NRB reporting standards. This was a wake up call to many of the finance companies which operated as a family run business. Overnight prudential regulations were in effect compelling them to transform and be transparent. The Umbrella Act was a beginning towards harnessing all the various players towards operating in a transparent and highly regulated system. The Umbrella Act of 2004 narrowed the gap between a commercial bank, a development bank and a finance company. However, none of the new directives were enablers to make the financial sector neither more endemic nor far reaching. In contrast, the new directives only increased the competition in an already over-crowded market, and has attempted to enforce prudential regulations on all. Out of the three categories, category "C" group, finance companies may boast that not a single member company has been penalized for misconduct of operations or on any other issues by NRB. (NRB, 2009, P. 81)

Finance companies can be considered as quasi-banking institutions in Nepal. They collect deposits; extend loans and advances to various sectors. The principal sources of fund of these companies beside equity are time deposit collections and issuance of debentures. The resources thus collect are invested in hire purchasing, housing finance, leasing finance, investment in government securities and bonds, issuing guarantee which are approved by Nepal Rastra Bank (NRB) for the finance companies. Therefore finance companies can be considered as complementary to commercial banks to some extent. The growth of business activities necessitated the financial institutions because they are the institution that supply capital required for business and fund for other purposes. These financial institutions have been set up with a motive to collect the spreaded deposits from all over and provide these deposits in the form of short term and long term loan. Categorized as "C" by Nepal Rastra Bank, these institutions govern by Bank and Financial Institutions Act, 2063 and perform in accordance to the directives laid by NRB. As per financial Stability Report July 2012 by NRB, altogether, there are 69 finance

companies with 292 branches operating in Nepal as on mid-July 2012, which covers 7.10% of market shares in total deposits, 8.55% of market shares in total lending and 13.30% of market shares in capital fund.

# **2.1.3 Functions of Finance Company:**

In Nepal, Finance companies are categorized as "C" class financial institutions. The primary functions of finance companies are to make loan to both individual and business. These companies are popular among low income and medium class people. There are not any restrictions for finance companies to invest in the government securities and NRB bonds. But they have to perform their activities under Bank and Financial Act 2063 and as prescribed by the NRB directives. Major functions of finance companies can be categorized as follows:

- a) Accepting Deposits: Finance companies accept three types of deposits from its customers.
  - Fixed Deposit: Fixed deposits are also known as time deposit or term deposit. They carry a fixed maturity, a penalty is charged for early withdrawal. Savers that do not need money for a stipulated period from 3 months to longer periods up to 6 years are encouraged to keep it in fixed deposits. This type of deposit offer higher interest rate than saving deposit. Longer maturity period gets higher rate of interest. However the depositor can take 90 percent loan from finance companies against the security of fixed deposit receipt.
  - Saving Deposit: Finance company accepts saving deposits from individuals and institutions. The main purpose of saving deposit is to encourage the habit of saving among common people. Depositors can deposit any amount in their account in any time. They should convey prior information to withdraw the amount in case of beyond the restricted limit. They provide interest on daily basis on saving deposit.

- **Recurring Deposit:** The account under which fixed amount of money should be deposited on each installment for a certain period of time is called recurring deposit. Such account is targeted for having fixed regular income with an objective to develop saving habit. Finance company repays the total amount with interest at maturity.
- **b) Providing Loan:** Another function of finance company is to provide loan on demand of its customers. Depending on the needs of various economic activities, finance company provide different types of loan which are as follows:
  - **Hire Purchase Loan:** Under this type of loan, finance companies provide loan for the purchase of vehicle, machines, equipments and tools, durable household goods and other movable property. Interest rate depends upon condition of borrower and repaid on installment basis.
  - Housing Loan: Under this type of loan, finance companies provide loan for the purchase of land, construction of residential as well as commercial building and warehouse. The loan may be disbursed in installment basis in case of construction after verification of progress of project. Interest rate of this type of loan depends upon economic condition and tenure of loan. Repayment of this type of loan used to be installment basis.
  - Loan against FDR: Under this type of loan, only the individuals or institutions, who have made fixed deposit allowed to get certain percent of amount as loan. The fixed depositors can get the loan up to 90 percent of fixed deposit amount. Finance company charges +2% to 2.5% additional interest in this type of loan.
  - Other Loan: Finance companies also provide loan for the expansion of trade and industry, further education, health, tourism, agriculture, irrigation etc.
- c) Other Functions: Other financial services provided by finance companies are: issue of shares and underwrite, act as financial

guarantor, acts as commission agent, collect share applications, lease financing, purchase and sale of government securities etc. Finance companies also act as custodian of valuables of the costumers by providing locker facility, where they can keep their jewelry and valuable documents. They can also perform merchant activities with prior approval of NRB. It issues various forms of financial instruments such as cheque, drafts, travelers' cheque, electronic card, which facilitate transactions. They also perform other functions as prescribed by NRB.

#### 2.1.4 Fewa Finance Limited

Fewa Finance Limited (FFL) is a national level 'C' class financial institution. It was established in 2060 B.S with the objective of providing financial support to different productive and needy sectors by collecting the small and large saving all around the country for the overall development of the nation under free economy policy of the Nepal government. It is the fourth finance company based on western development region (Pokhara). The Head office is located in Chipledhunga, Pokhara. At present, is has 13 branches including head office till Ashad end 2069, situated at Birauta, Pokhara; Khichpokhari, Kathmandu; Jomsom, Mustang; Amarsingh chowk, Pokhara; Maharajgunj, Kathmandu; Bagar, Pokhara; Butwal, Rupandehi; Fidim, Ilam; Bharatpur, Chitwan; Tamghas, Gulmi; Prayagpokhari, Lalitpur; and Damak, Jhapa.

Currently, it has authorized capital of NRs.700 millions and issued and paid up capital of NRs.300.3 million each. Investment of promoter shareholders have occupied 60 percent of its capital and remaining 40 percent is invested by public shareholders. FFL is planning to provide the services to all ethnic groups in all places and all kind of people opening its branches to different part of the country. It is going to increase the paid up capital according to the direction of NRB in future.

#### **2.1.5 Financial Performance Analysis**

Financial performance analysis is the process of identifying the financial strength and weakness of the firm by properly establishing the relationship between item of balance sheet and the profit and loss account. It is undertaken to assess the financial strength and weakness of the firm. The analysis is usually based on the financial statement prepared by firm. Financial analysis serves as the basis for decision making. Financial analysis uses data contented in firm's financial statement supplemented by the statement of cash flows. Furthermore, it summarized the large quantity of financial data and makes qualitative judgment about the firm's financial performance. Performance evaluation is the important approach for enterprises to give incentive and restraint to their operators and it is an important channel for enterprise stakeholders to get the performance information (Sun, 2011). The primary tools of financial analysis are financial ratios. Financial ratios provide a good technique for assessing financial performance.

Ratio is the expression of one figure in terms of another. It is an expression of the relationship between mutually independent figures. It is a simple mathematical expression of the relationship one item with another. Absolute figures alone convey no meaning unless they are comparing each other. Accounting ratios show the interrelationship among various accounting data. Wixon and Bedford has stressed that a ratio is an expression of the quantitative relationship between two numbers. Thus, ratio refers to the numerical or quantitative relation between two items or variables (Kunchal, 1980). The evaluation of a firm's performance usually employs the financial ratio method, because it provides a simple description about the firm's financial performance in comparison with previous periods and helps to improve its performance of management (Lin, Li and Chu, 2005).

Every business entity should be able to enhance their competitive strength through achieving the financial goals. Financial institutions strength is usually thought of both in quantitative terms, namely a firm's intrinsic financial condition as reflected in its capital, reserves, asset quality, earnings and liquidity and in qualitative terms as evidenced in the underlying quality and effectiveness of management, internal controls and risk management policies and practices. The soundness of financial institutions is found on a strong balance sheet and strong management. There are many approaches for measuring the performance of financial institution focuses on balance sheet and income statement.

Banking sector is an important and unquestionable determinant of the economic development as it directs the flow of the funds from surplus economic units of the economy towards deficit economic units (Khan, 2006, P.11) Banking industry being an important pillar of financial sector of an economy, its performance measurement cannot be neglected. Organizations that build a financial sector are run mostly by the public money, so it is very important to measure their performance.

#### 2.1.6 Different Approaches of Bank and FIs Supervision Techniques

#### 2.1.6.1 On-Site Supervision

Supervisors make an overall assessment of the financial condition and performance of the bank by means of on-site examination. Under this approach, an examination team carried out a field visit to the bank and FIs. They inspect certain areas such as capital adequacy, loan portfolio management, treasury management, operational risks, MIS, information technology etc. This manual provides guidelines to the examiners for preparing inspection report. This approach covers the assessment of qualitative factors such as management capabilities and internal control procedures that may not be reflected adequately in the regulatory reports. These examinations are important to verify report accuracy and to gather further supervisory information.

#### 2.1.6.2 Off-Site Supervision

Offsite supervision or detection methods mandate periodic bank reports, in addition to the financial disclosures and reports collected by the respective departmental examiners. Examples of periodic financial disclosures or reports that are useful to bank supervision are reports of condition of deposits, advances and income; legal lending limit exposure reports; and reports of indebtedness of executive officers and principal shareholders and their related interests to banks. The data are supplemented by generating critical ratios related to bank performance, and analysis of key bank financial ratios and other financial data. The offsite surveillance in Nepal and analysis can serve as illustration of the process. Offsite analysis precedes on-site examinations and inspections. This offsite system is used as well in evaluating applications filed for opening of new branches, granting of demand loans etc. The entire health of the banks is verified through this process.

#### **Importance of Offsite Supervision**

The advent of the "information age" has brought a new process for FI supervision technique: offsite bank and FI surveillance systems for the collection and interpretation of regular reporting returns and other statistical data. Several countries in Asia have implemented offsite supervision systems. Offsite monitoring systems have a number of advantages:

- a. This system is less costly than on-site supervision program;
- b. This system can be updated frequently when new information is received through quarterly financial returns;
- c. It can provide the basis for a financial evaluation of the bank between examinations; and

d. It is potentially able to isolate risk factors that may lead to future problems.

Therefore, offsite monitoring systems complement examinations' focus on the bank's current condition, implementation status, deposit, credit, income, and capital, and are designed to accomplish a number of objectives. Foremost, they serve as an "early warning device" to detect emerging bank's financial problems. The success of an offsite supervision system hinges on several elements. First, the accuracy and timeliness of the data submitted by banks. Second, the technology used to capture the data and compile the comparative ratios, trend analyses and percentile ranks relative to peers. Finally, the analyst makes a judgment based on a variety of financial ratios and trends, and combines the findings to offer compelling evidence of a specific bank's financial condition.

#### A Simple Framework for Banking Regulation and Supervision

There is no theoretically optimal system or standard textbook blueprint for the structure and process of regulating and supervising financial institutions, including banks. In fact, arrangements for banking regulation and supervision differ considerably from country to country. Apart from differences in political as well as historical financial environmental structures, the most important factors that account for the differences in regulatory and supervisory approaches include the general complexity and state of development of the financial system, the number, size and concentration of banking institutions, the relative openness of the domestic financial system, the nature and extent of public disclosure of bank & FIs' financial positions, capacity of the banking supervisory boards to give verdict on different modern financial questions and the availability of technological and human resources for regulation and supervision.

Over the last few years supervisors have adopted new approaches and developed new systems for ongoing banking supervision in order to be better equipped to face newly created manifold challenges presented by financial innovation and globalization measures. These new systems seek to assess and track changes in a bank's financial condition and risk profile and to generate timely warning for the supervisor to help initiate warranted action.

#### **Off-site Supervisory Bank and FIs Rating Systems**

## > PATROL Rating System

The Bank of Italy has introduced the annual PATROL rating system in 1993 as an off-site supervision tool to give a systematic representation of the financial health of individual banks and provide support in prioritization of the use of supervisory resources in scheduling on-site examinations. As there is no specific mandate for periodic on-site examinations of banking institutions in Italy, they are undertaken based exclusively on evidence provided by the whole set of information available for analysis to the supervisor for assigning PATROL ratings.

The main inputs for the PATROL off-site analysis include information from monthly, semiannual and annual regulatory reporting data received by the Bank of Italy. The five components of PATROL are capital adequacy, profitability, credit quality, organization and liquidity. Capital adequacy is assessed by comparing the own funds of a bank with regulatory prescriptions of capital for credit risk, position risk, settlement risk, market risks and exchange rate risk. To assess profitability, the economic results net of extraordinary items are related to the requirement to cover capital losses stemming from bad debts, and the return on equity is related with the average of the banking system. The interest margin is also taken into account. Credit quality is assessed on the basis of aggregate data of adjusted bad debts derived from the central credit register and an individual loan concentration index. The organizational component is assessed on the basis of ad hoc information available to the analyst, on information obtained from meetings held with the management of banks and onsite examination results. Liquidity is assessed after ascertaining maturity

mismatches under normal operating conditions, and by simulating exogenous shocks over a one-year time horizon. Two stress scenarios are also simulated, which include a sudden outflow of customer and inter-bank deposits and an increase in the share of used credit facilities on behalf of borrowers, to see how the bank would perform under adverse conditions.

Each component of PATROL is rated on a scale of 1 (best) to 5 (worst) based on supervisory criteria and guidelines. Five individual component ratings are converted into a composite rating, also on a scale of 1 (best) to 5 (worst), which includes all other quantitative and qualitative information available to the analyst. Ratings assigned are validated through comparisons with the actual results of on-site examinations. (Sarker, 2005, P. 3)

#### > ORAP Rating system

ORAP stands for Organization and Reinforcement of Preventive Action is a supervisory rating system implemented in 1997 by French Banking Commission. This is a multi factor examination system for investigation of individual banks. Aim of this system is to identify probable weakness of banking organization by tentative investigation of all business activities of a bank related risk factors with the help of quantitative and qualitative measures. ORAP use both internal and external sources of information for examination of the bank.

ORAP is a standardized and dignified mechanism and its rating is based upon 14 crucial components. ORAP almost cover all of the business activities of a bank and its associated risk factors such as capital held by the bank, on and off-balance sheet activities of the bank, its market risk, earnings in a specific period of time and qualitative measures and criteria" s. Under heading of capital ORAP includes capital of the bank, capital adequacy ratio, liquidity and large exposures. On and off-balance sheet activities includes quality of the bank assets, bad loans and provision provided by the bank against bad loans. Qualitative measures such as number and type of shareholders, management of the bank and its internal control. These components are rated on the basis of financial ratios on a scale from 1 to 5. Rating 1 represent best position of a component where as rating 5 represent worst positions. After rating each and every component, they are transformed into composite rating similarly on the scale of 1 to 5 in which 1 represent best position and 5 represent worst position of a bank overall position (Sahajwala & Bergh, 2000, p. 11).

## GIRAFE Rating System

PlaNet Finance provides rating services to financial institutions, micro finance institutions (MFIs), financial backers, supervisors and regulators, as well as auditors and consultants. The financial and organizational performance of MFIs is objectively evaluated, and the results are translated into rating reports, accompanied by a spread on the Internet. A debriefing interview with the institution and the backers is also included. There are six areas of assessment. Governance and decision making processes, Information and management tools, Risks analysis and control Activities and loan portfolio Funding: equity and liabilities Efficiency and liability. GIRAFE stands for Governance and decision making processes, Information and management tools, Risks analysis and control, Activities and loan portfolio, Funding: equity and liabilities and Efficiency and liability. (Sarker, 2005, P. 5)

#### > PEARLS Rating System

PEARLS uses a set of financial ratios to monitor the financial stability of the credit unions within WOCCU's developing movement projects. These ratios provide credit unions, project staff, national federations and regulators with essential tools for monitoring, planning, standardizing, ranking and facilitating supervisory control in credit unions. Each letter in the word PEARLS measures the key areas of credit union operations: Protection, Effective financial structure, Asset quality, Rates of return and costs, and Liquidity and Signs of growth.

Protection is measured by comparing the adequacy of the provisions for loan losses against the amount of delinquent loans. A credit union has adequate protection if it has sufficient provisions to cover 100% of all delinquent loans for more than 12 months and at least 35% of loans delinquent between 1 and 12 months. Effective Financial Structure of the credit union is the single most important factor in determining growth potential, earnings capacity and overall financial strength. The PEARLS system measures credit union assets, liabilities and capital, and then recommends the "ideal" structure. Credit unions are encouraged to maximize earning assets as the means to achieve sufficient earnings. A non-earning asset is one that does not generate income. An excess of nonearning assets negatively affects credit union income. PEARLS indicators are used to identify the impact of non-earning assets by analyzing delinquency ratios, percentages of non-earning assets and the financing of non-earning assets.

By segregating all of the essential components of net earnings, the PEARLS system helps management calculate investment yields and evaluate financial costs and operating expenses. PEARLS calculate yields on the basis of average outstanding investments, unlike other systems that calculate yields on the basis of average assets. Yield is computed in four main areas: loan portfolio, liquid investments, financial investments and other non-financial investments. Operating costs are also important and broken down into three main areas: financial intermediation costs, administrative costs, and unrecoverable loan costs. By segregating income and expenses into the previously mentioned areas, PEARLS ratios can accurately pinpoint the reasons why a credit union is not producing sufficient net income.

Liquidity is traditionally viewed in terms of cash available to lend - a variable exclusively controlled by the credit union. With the introduction of withdrawable savings deposits, the concept of liquidity radically changes. Richardson explained, "Liquidity now refers to cash needed for withdrawals - a variable the credit union can no longer control. The maintenance of adequate liquidity reserves is essential to sound, financial management of the new credit union model." PEARLS analyzes liquidity from three perspectives: total net liquidity reserves, obligatory liquidity reserves, and idle liquid funds. The advantage of the PEARLS system is that it links growth to profitability, as well as to other key areas by evaluating the strength of the system as a whole. Growth is measured in seven key areas: total assets, loans, savings deposits, external credit, shares, institutional capital and membership. (Sarker, 2005, P. 5)

#### CAMELS Rating System:

CAMELS stands for, Capital adequacy, Asset quality, Management, Earning, Liquidity, and Sensitivity to market risk. Capital adequacy represents the relationship between equity and risk weighted assets, how to rise equity and measure the ability to which the organization observe the loan losses. Asset quality, the quality of a portfolio, assesses the portfolio risk and shows the productivity of long term assets. Management, to know the board of directors functions weather they are performing well or not and its decision making ability. It also evaluates the performance of human resource management weather they give support and clear guidance to staff, all the facilities which staff needed i.e. incentive system for personnel, training, etc. Computerized information system also takes into consideration whether the systems are operating well and provide accurate and timely reports to the management. Earning; quantifies the performance of the institution to increase and maintain the total worth through earnings from operations. It also assesses the interest rate policy, management examine and adjust the interest rate on micro finance loans and evaluate the adjusted return on assets that how well the assets are

utilized (Sarker, 2005, p. 7). Liquidity Management; scrutinizes institution liabilities like interest rate, payment terms, tenor etc. It also evaluates fund availability to meet its credit demand and cash flow requirements (Sarker, 2005, p. 8). Sensitivity, to assess the risk of the market primarily based on adverse changes in commodity price, interest rate, foreign exchange rate, fixed assets and the ability of management to identify and control these risks (Trautmann, 2006, p. 43).

# 2.1.7 Concept of CAMELS as Bank Rating System

CAMELS methodology was originally adopted by North American Bank regulators to evaluate the financial and managerial reliability of commercial lending institutions. To examine the CAMELS system, information is required from different sources such as financial statements, Funding sources, macroeconomic information, budget and cash flow projection, staffing/operation. This model assesses the overall condition of the Bank, its strengths and weakness (Sarker, 2005, p. 6).

The BASEL Committee on Banking Supervision of the Bank of International Settlements (BIS) has recommended using CAMEL criteria for assessing a FI in 1998. The sixth component sensitivity to market risk (S) was added to CAMEL in 1997 (Gilbert, Meyer and Vaughan 2000). However, most of the developing countries are using CAMEL instead of CAMESLS in the performance evaluation of the FIs. The central banks in some of the countries like Nepal, Kenya use CAEL instead of CAMELS. CAMELS framework is a common method for evaluating the soundness of FIs. This system was developed by regulatory authority of the U.S. banks. The Federal Reserve Bank, the comptroller of the currency and federal deposit insurance corporation all use this system. Monetary authorities in most of the countries are using this system to check up the health of an individual FI. In addition, International Monetary Fund is also using the aggregated indicators of individual FIs to assess the financial system soundness of its member countries as part of its surveillance work (Baral, 2005)

CAMELS rating system is to be evaluated on the scale of one to five rating in ascending order (National Credit Union Administration, 2003).

**Rating 1:** Rating 1 signifies safe and sound operations through strong performance and risk management practices.

**Rating 2:** Second rating reflects safe and sound operations through satisfactory performance and risk management practices.

**Rating 3:** Here the performance is marginal, unsatisfactory practices and flawed to some degree, means that weak performance but limited concern for failure.

**Rating 4:** It is significantly below average, poor performance and requires close supervisory attention and immediate action.

**Rating 5:** Reflects unsatisfactory performance, there is a great chance of failure and very difficult for the management to control. Immediate actions needed to be taken in the form of liquidation, payoff shareholders, merger, acquisition etc.

# Capital Adequacy (C):

The deference between total assets and total liabilities is called capital. It shows ability of the firm that liability could be privileged. It assumes that if all the assets of the bank take as a loans and deposits as liability. If there is any loss from loans it will be a great risk for banks to meet the demand of their depositors. Therefore to prevent the bank from failure it is necessary to maintain a significant level of capital adequacy (Chen, 2003, P. 21).

Basel capital accord set the rules for the Capital requirements. It represents the capital standard for banks which applied to banks in G10 countries. The

Basel capital has two parts. These are, Tier one, and Tier two (Chen, 2003, P. 21). The capital adequacy for banking institutions the ratio should be superior to 8% or we can say that the total capital must be over 8% of its risk weighted assets. But NRB has fixed the core capital at the level of 5.5 percent of the risk weighted assets and total capital at the level of 11 percent of risk weighted assets of the Finance Companies (NRB 2069). The formula for Capital Adequacy ratios are;

Capital Adequacy Ratio (CAR)= (Tier I+Tier II)/Risk-Weighted Assets

This ratio determines the ability of the bank to meet with obligation on time and other risk such as operational risk and credit risk etc.

**Core capital (Tier I):** Tier one is a type of capital, it is a composed core capital or we can say own capital which consist primarily of common stock, preferred stock, convertible bonds and retain earning.

**Supplementary Capital (Tier II):** It is a supplementary form of bank's capital. Tier II also known as hybrid because it includes that amount which is derived from issued bonds by the banks. These amounts reduced guarantees to buyers because these are of long-term in nature. Tier I should be at least half of the total amount the numerator. There is a great chance of better bank's capital adequacy if there is a higher value of index, because of this institution can totally rely on self-financing (Christopoulos, Mylonakis and Diktapanidis, 2011, p. 12).

Capital is rated on the following thoughts (Trautmann, 2006, p. 8):

- On the basis of problems that capital adequacy has in relation
- On the basis of Balance sheet structure, off balance sheet items, and different type of risk like market and concentration
- On the basis of business activities and bank risks
- Dividend distribution and earning performance

- Sources of capital and how to access capital markets?
- On the basis of management ability to deal with the above factors.

# **Rating of Capital Adequacy**

Each of components in the CAMEL model is scored from 1 to 5. In the context of capital adequacy, a rating of 1 indicates a strong capital level relative to the financial institution's risk. Meanwhile, the rating of 5 indicates a critical deficient level of capital, in which immediate assistance from shareholders or external resources is required. (Uniform Financial Institutions Rating System, 1997, p. 4).

# **Capital Adequacy Norms by NRB**

The total capital of FIs is the sum of core capital and supplementary capital. NRB has from time to time stipulated minimum capital fund to be maintained by the FIs on the basis of risk weighted assets. The total fund is the sum of core capital and supplementary capital. According to the NRB unified directives for banks and FIs issue number E.Pra.Ni,No.1/065 applicable from 2065/04/01, the capital funds of finance company comprise the following:

**Core Capital (Tier I):** Core capital also known as primary capital includes paid-up capital, share premium, Irredeemable non-cumulative preference share, general reserve, accumulated profit and loss, capital redemption reserve, capital adjustment fund and other free reserves. However, where the amount of goodwill, Fictitious Assets, Investment in equity in licensed FIs, Investment in equity of institutions with financial interests, Investment in equity of institutions in excess of limits, Investments arising out of underwriting commitments, Reciprocal crossholdings and Other deductions shall be deducted for the purpose of calculation of the core capital.

Supplementary Captial (Tier II): Supplementary capital includes Cumulative and/or Redeemable Preference Share, Subordinated Term Debt, Hybrid Capital Instruments, General Loan Loss Provision, Exchange Equalization Reserve, Investment Adjustment Reserve and Other Reserves not allocated for a specific purpose.

#### **Total Risk-weight Assets**

For the purpose of calculating capital fund, the total risk-weight assets have been classified into two categories: (1) On-balance-sheet risk-weight assets and (2) Off-balance-sheet risk-weight transactions. For the purpose of calculating the capital fund, the on-balance- sheet assets and Off-balancesheet transactions have been divided by NRB with assigning separate risk weight, which have to be calculated by multiplying the amount with assigned risk-weight.

## Assets Quality (A):

Asset quality is one of the most important elements of CAMELS frame work to rate a financial institution/bank (Jerome, 2008, p. 6). Decision regarding allocation of the deposited amount of the bank in loan portfolio, investments, owned real estate, securities and off balance sheet transaction determines the quality of its assets. These are taken into consideration while calculating the default/credit risk of a bank. Quality of these assets indicates the future losses to the bank and its ability to overcome these unanticipated loses. Madura, 2009 in his book *FINANCIAL MARKETS & INSTITUTIONS* discusses that to evaluate quality of the loans pass on by the banks, Federal Reserve System (Central banking of America) consider 5C's that are as under (Madura, 2009 p.65):

- Capacity: Ability of the borrower to pay back the loan
- Collateral: Amount and quality of backup assets
- Condition: Situation that propel for requirement of the funds
- Capital: It is calculated by the difference between the value of assets and liabilities of the borrower
- Character: Willingness and previous record of the borrower to repay the loan.

There are several other quantitative factors that can lead to the collapse of a financial institution but corrosion in the quality of assets is the root cause where problem starts. Deterioration and enhancement in the quality of assets is the main source of difference in a bank's earnings because its prime objective is in providing credit. Assessment of the risk profile of a bank and how it deals with these risks also plays a significant role in evaluation of quality of the assets. Some of the main factors may include high-quality of understanding of its underwriting principles, good screening bad-debt identification system and collateral system, management mechanisms. Non-performing loans, reserve policies for these bad-debt and coverage for these non-performing loans of a bank is also an important factor in the assessment of assets quality. Off balance sheet activities of the banks are increasing with a rapid pace so it is of great importance to measure these activities such as derivatives and swaps (Jerome, 2008, p. 6-7).

Evaluation of quality of the assets is primarily based upon assessment of the bank portfolio and the credit risk associated to it. Capabilities of a bank to identify, quantify, observe and control credit risk and judged where as provision against these bad and non performing debts are also taken into account (Christopoulos, Mylonakis and Diktapanidis, 2011, p. 12).

# **Rating of Asset Quality**

Each of the components in the CAMEL rating system is scored from 1 to 5. In the context of asset quality, a rating of 1 indicates a strong asset quality and minimal portfolio risks. On the other hand, a rating of 5 reflects a critically deficient asset quality that presents an imminent threat to the

institution's viability. (Uniform Financial Institutions Rating System 1997, p. 5).

# Non-Performing Assets/Loans (NPAs/NPLs)

One of the measures to determine the quality of asset is to judge the assets in terms of performing non-performing. Assets are said to be performing in the sense when the assets thus invested generate regular cash inflow whereas the assets failing to generate cash inflow are termed to be nonperforming assets.

Being specific, loans and advances are those assets which the FI expect timely repayment of the loan from the borrowers as per the agreement. In case of the default in the repayment, the asset turn into non-performing and declare as NPA.

FI with higher proportion of loan in the total assets will be more riskier as there is possibility of turning the performing loan into NPL in case of adverse effect by the internal and external factors. Rising level of NPA increases the loan loss provision ratio and higher loan loss provision has adverse effect on the profitability of the FIs and sometime even results in bankruptcy. Higher level of NPA can be the cause for crisis in the financial sector. The financial crisis emerged from Thailand in 1997 A.D. was largely considered due to high level of NPAs. It has worstly effected the FIs mainly in South-East Asian countries with higher proportion of loan in the total assets. Whereas, FIs such as in Nepal and India having lower proportion of loan in the total assets were less affected. Similarly, various scholars and analysts have concluded that the latest global financial crisis 2008 emerged from America was also largely due to high level of NPAs. Thus FIs need to be careful regarding the level of NPAs so that the situation remains under control.

## NRB Directives related to assets quality

NRB unified directives for and FIs through directive number E.Pra.Ni.No.02/065 (effective from 2065/04/01), requires the bank and FIs to classify outstanding loans and advances on the basis of aging of Principal amount. As per the directive, the loan and advances should be classified into the following four categories:

- (a) Pass: Loans/advances which have not overdue and which are overdue by a period up to three months. In addition, Loans/advances extended against the collateral of gold and silver; Loans/advances of fixed receipts and Loans/advances of Government of Nepal securities and loans/advances made against the collateral of Nepal Rastra Bank bonds are also included in pass loans.
- (b) Sub-standard: Loans/advances which are overdue by a period from three months to a maximum period of six months.
- (c) Doubtful: Loans/advances which are overdue by a period from sixmonths to a maximum period of one year.
- (d) Loss: Loans/advances which are overdue by a period of more than one year. Beside this, any loan whether pass due or not, in situations of inadequate security, borrower declared insolvent, debtor disappears or is not identified, misuse of loan, loan provided to blacklisted debtor and other prescribed by NRB to loss category are to be classified as loss category.

The loans which are in pass class are called as "performing loan", and the rescheduled/restructured, sub-standard, doubtful and loss categories are called "Non-Performing Loan (NPL)"

The directive further requires to bank and FIs to provision for loan loss, on the basis of loan classification. Loan loss provision set aside for performing loans is defined as General Loan Loss and that set for NPL as Specific Loan Loss Provision.

Loan Classification	<b>Provision for Loan Loss</b>
Pass	1%
Sub-standard	25%
Doubtful	50%
Loss	100%

With the objective of lowering the concentration risk of bank and FIs' loans to a few big borrowers & sectors and to increase the access of small and middle size borrowers to the bank loans, NRB has fixed the limits through directive number E.Pra.Ni.No.03/065, bank and FIs may extend to a single borrower or group of related borrowers the amount of fund-based loans and advances up to 25 percent of its Core capital fund and non fund-based off-balance sheet facilities like letters of credit, guarantees, acceptances, commitments up to 50 percent of its Core capital fund. The existing single obligor limit has been fixed as gross the limit not exceeding 25 percent of the core capital inclusive of the fund-based and non-fund based limits effective from 15 January 2011.

#### Management Efficiency (M):

It is difficult to determine the sound performance of management of the bank. For individual institution it is not a quantitative factor it is primarily qualitative factor. How to measure the soundness of the management? However there are quite a few indicators to assess the soundness of the management these are: earning per employee, cost per loan, cost per unit of money lent and average loan size, expense ratio, these indicators can be used to measure the management quality (Baral, 2005, p. 44).

Management can be evaluated in the CAMELS framework according to (Sundararjan, Errico, 2002, p. 10):

- Leadership, administration ability, and competency in technical work
- Bank's management has the ability to deal with changing situations
- Obedient to banking law and regulations
- Agree on internal policies
- To show keenness in fulfilling the legal need of the community.

## **Rating Factors:**

In the success of bank operation management is the most important element. On the following factors rating is based on these are (Trautmann, 2006, p. 22):

- Board of directors and management of the bank have the abilities to observe and support business activities and the risk associated with these activities and also make plan for future
- It is the management responsibility to develop and implement the written policies, procedures, reporting, MIS, documents safety, risk monitoring system, Have the ability to deal with changing situation
- Internal and external audit must be available
- Job explanation, reward policies
- Bank risk and overall performance.

### **Rating of Management Efficiency**

Each of components in the CAMEL rating system is scored from 1 to 5. In the context of management, a rating of 1 is assigned to note the management and board of directors are fully effective. On the other hand, the rating of 5 is applicable to critically deficient management. Replacing or strengthening may be needed to achieve sound and safe operations. (Uniform Financial Institutions Rating System 1997, p.7).

# **Earning Performance (E):**

To stay in the market for a long term, banks are totally dependent upon generation of adequate earnings, rewards to be paid back to its shareholders, protect and improve its capital. To be accepted publically totally depends upon sufficient earnings if there are losses it reduce the capital and liquidity (Couto & Brasil, 2002, p. 3).

Earning of a bank is a significant gauge to analyze its financial strength. As we know that money itself is merchandise of the banks, for a longer period of time banks can maintain losses before they get out of cash. Supervisor must take action whenever they realize that the bank's earnings are decreasing or the bank may goes into bankruptcy. It is difficult for the supervisor to look into the earnings record of the bank and simply form an opinion about earning position. Past earning performances have its effects on the bank's balance sheet but If conclusion of the supervisor is based upon the results which have taken from the earning records and will used for timely action, it is suggested that supervisors should be concerned with the indicators that reflect bank's future financial positions and future result (Couto & Brasil, 2002, p. 3). To measure bank earning several variables are used. The ratios used are, ROA = Net profit/total assets. This ratio avoids the volatility of earnings linked with unusual items, and the profitability of the bank. The higher of the ratio greater the profitability and has a positive connection with CAMELS. It also compares the total assets with net profit and shows that assets management is well-organized to make profit or not (Gasbarro, et al, 2002, p.254). Second ratio which is used to measure earnings of bank is ROE = net profit/own capital. This ratio shows the efficiency of the bank, that how the bank uses its own capital in an efficient manner. It is very easy for the efficient bank to produce money using its own capital (Christopoulos, et al, 2011, p. 13).

# **Rating factors:**

According to the following factors earning can be rated (Trautmann, 2006, p. 29):

- Enough earnings are required to cover losses, ample capital and to pay dividend
- Operational sources
- Business activities that are highly risky, trust on extraordinary items, transactions of securities
- Sufficiency of provisions
- Budget sufficiency, forecasting
- Earning risk such as variation in interest rate, price risk and fluctuation in foreign exchange rates.

# **Rating of Earning Ability**

Each of the components in the CAMEL rating system is scored from 1 to 5. In the context of earning, a rating of 1 reflects strong earnings that are sufficient to maintain adequate capital and loan allowance, and support operations. On the other hand, a rating of 5 experiences consistent losses and represents a distinct threat to the institution's solvency through the erosion of capital. (Uniform Financial Institutions Rating System 1997, p.8).

#### Liquidity Management (L):

There is argued role of the traditional financial intermediaries in the modern capital markets and argues that center of attention of many present days' theories of financial intermediation are the institutions that are no more considered as vital in the developed financial systems. It is argued that theses financial intermediaries focus on the product and services that are losing their importance in the markets and are unable to capitalize on the new and emerging intermediary products and services. According to Berger & Bouwman 2009, liquidity creation and transformation of the risk are the two most important roles perform by the financial intermediaries in a financial system. Bryant 1980 and Diamond & Dybvig 1983 discuss in there articles that creation of liquidity is the most important function of the banking system. They argued that they create this liquidity on their balance sheet such that by financing comparatively liquid assets by means of comparatively liquid liabilities (Berger & Bouwman, 2007, p. 1). When banks are the originators of the financial crises it is difficult for the bank to magnetize deposits and making it difficult for the investors of the security market to attain liquidity (Mora, 2010, p. 30-31).

Banks are conventionally endowed with liquidity on demand to both borrowers and depositors. This particular role of liquidity assurance played by the bank exposes them to the threat of non availability of funds to meet the accidental demand of both borrowers and depositors. As we discussed above that Diamond & Dybvig 1983 argued in their literature structure of the bank itself and specifically structure of its balance sheet and by putting their funds in an intermediary, banks secure themselves from particular risks and putting their investments in high return and easily liquid projects. This particular structure of the bank leads them towards their prospective of self-fulfillment and to set up a policy for the insurance of the deposits of the investors (Gatev, 2009, p. 996). In a standard CAMELS rating system, liquidity of a banks is measured according to: unpredictability of a bank's deposits, dependence of the bank on interest sensitive funds, methodological proficiency of a bank relative to the structure of liabilities, assets of the bank on its balance sheet that can be very easily converted into cash, access and availability of inter-bank markets and cash recourses such as LLR (Lenders Last Resort) services provided by the central bank of the country (Sundararajan & Errico, 2002, p. 11).

Any financial institution or bank that maintains a high level of liquidity have the capability to overcome the difficulties it may face in short term business activates, keep the cash supply lines open in case of financial distress and can grab the available investment opportunities that may result in a good return. In short term perspective, liquidity of a financial institution / bank depends upon their capabilities to fulfill day to day expenses and gratify the demands of withdrawals by the depositors. Primarily there are three main components that help any financial institution to attain liquidity: their anticipated future cash inflow and out flow, access of the bank to inter-bank market and the highly liquid assets that can be easily converted into cash (Jerome, 2008, p. 10).

For liquidity evaluation of a bank, its current status of liquidity is taken into consideration in relation to the liabilities it has. It also considers the capacity of the bank to deal with the possibility of unanticipated changes in its financing resources and prevailing market conditions that will affect liquidation of its assets and the minimum possible erosion in its earnings (Christopoulos, 2011, p. 13).

Total Loan to Deposit Ratio = Total Loans / Total Deposits, This particular ratio of Loan to Total Assets shows proportion of the deposits of the bank to issue loan and its dependence on the interbank market. If the result of this ratio is lower, it means that bank maintain good level of

liquidity, and if the value is less than 1 so it shows that deposits of the banks are enough to cover the loan obligations and are secured.

Liquid Assets to Total Assets = Liquid Assets / Total Assets, This ratio shows status of bank's liquidity in respect to its liquid assets that may include cash available in hand, claims of the bank against other banks in inter-bank market, bank's investment, derivatives and swaps. If the ratio is higher it shows this particular bank have good level of liquidity (Christopoulos, Mylonakis and Diktapanidis, 2011, p. 13).

#### **Rating of Liquidity Management**

Each of the components in the CAMEL rating system is scored from 1 to 5. In the context of liquidity, a rating of 1 represents strong liquidity levels and well-developed funds as the institution has access to sufficient sources of funds to meet present and anticipated liquidity needs. On the other hand, the rating of 5 signifies critical liquidity-deficiency, and the institution demands immediate external assistance to meet liquidity needs. (Uniform Financial Institutions Rating System 1997, p.9).

#### **NRB** Directives related to Liquidity

Financial institutions are required to keep certain percent of their deposits as Compulsory Reserve Ratio (CRR) in the account maintained in NRB to ensure adequate liquidity. NRB can change this CRR as per the requirement. Taking consideration of liquidity in the Nepalese market, currently NRB has decreased CRR to be maintained by the finance companies from 5.5% to 5% effective from 3 Bhadra 2069(NRB 2069). As per NRB directives, bank and FIs have to maintain CRR on weekly basis. In case the balance to be maintained as per directive falls short, the following fine shall be imposed:-

- (a) For the first time of shortfall in maintaining the compulsory reserve, at the rate of the percentage of the existing bank rate on such shortfall amount;
- (b) For the second time of shortfall in maintaining the compulsory reserve, at the rate of one and half of the percentage of the existing bank rate on such shortfall amount;
- (c) For the third time and successive times of shortfalls thereafter in maintaining the compulsory reserve, at the rate of double of the percentage of the existing bank rate on such shortfall amount.

## Sensitivity to Market Risk (S):

Earning and capital of financial institutions can be adversely affected by changes in exchange rate, interest rate, equity price or commodity price. Many financial institutions consider changes in interest rates as market risk. This S component of the CAMELS rating system mainly focuses on the ability of the bank to recognize, monitor, manage and control the market risk and give indication to management for the supervision in the problematic area. Sensitivity to the market risk is an extension of the Liquidity or we can say to focus on stock ratios whether bank has sufficient liquidity. To know that bank position is secure or not the management and credit analyst should thoroughly approach and make analysis of liquidity (Babar & Zeb, 2011, P.36).

Sensitivity of the market risk are examined by the banks to assess the changes in foreign currency, interest rate, product purchase and selling prices which totally effects the bank's assets values and profits. The ratio used to measure the sensitivity of the market risk is total securities divided by total assets. Banks now a day's have to changes themselves because of market demands. Portfolio may boost the bank's profit if the price movement is in favor of banks, and if it is not then it may create big

problems for the bank. The ratio tells the correlation of banks securities with total assets and provides us the percentage change of its portfolio with respect to alteration in interest rates or other issues associated with the issuer of the securities. The higher the value of this ratio is more risky, that the bank's portfolio is subjected to market risk. The lower the ratio is good for the bank since it shows the response towards market risk is appropriate (Christopoulos, et al., 2011, p. 13).

# **Rating factors:**

Evaluation of the market risk is primarily dependent upon the following factors (Trautmann, 2006, p. 43):

- Sensitivity to unfavorable changes in price of the commodities, foreign exchange rate, interest rate and fixed assets
- Bank's nature of its operations
- Changes in worth of bank total fixed assets
- Real estate assets impotence because of loans write off
- Tendency of the bank foreign currency exposure
- Capabilities of the bank management to recognize, quantify and control over the market risk with respect to the bank's exposure to these risk.

NRB unified directives (2065 B.S), E.Pra.Ni.No.05/065 requires the banks to classify the assets and liabilities on the basis of repayment maturity and conduct Gap Analysis of the maturity mismatch.

# **GAP Analysis**

This model focuses on GAP as a static measures of risk and NII as the target measure of FI performance. It modifies GAP analysis to focus on the sensitivity of FI earning across different interest rate environments. This

model attempts to measure how much IRR a FI evidences at a fixed point in time by comparing the rate sensitivity of assets with the rate sensitivity of liabilities. This model focuses on managing NII in the short run. The objective is typically to measure expected NII and then identify strategies to stabilize or improve it. IRR is measured by calculating GAPs over different time intervals based on aggregate B/S data at a fixed point in time. These GAP values are then examined to determine how much NII will change if rates change.

Gap shall be measured as follows:-

- (a) The gap between assets and liabilities shall be measured by subtracting the total liabilities from the total assets pertaining to each time intervals. Such gap may be positive or negative both.
- (b) For the purpose of minimizing the interest rate risk, the cumulative gap of each time interval shall also be measured. The cumulative gap is measured by summing the individual gaps up to and including the gap under consideration.
- (c) Possible changes in interest rate shall be estimated. For this purpose, generally the effect that may arise from changes of interest rates by one percent may be considered.
- (d) The expected change in interest rate estimated according to Sub-clause(c) shall be adjusted to each of the time interval. For this purpose, interest rate change (IRC) shall be multiplied by the following ratio:

=Days in the time interval/365 days.

For instance, where interest rate is changed by 1 percent, in the case of 90 days time interval,

Interest Rate Change (IRC) = 90/365 X 0.01 = 0.0025

(e) With a view to examine the effect on profitability of the bank on account of change in interest rate, the Cumulative Gap of various time intervals shall be multiplied by the interest rate determined per Subclause (d).

The most commonly used formula to measure GAP is:

$$GAP = \frac{RSAs - RSLs}{AEA}$$

Where,

RSAs and RSLs are those identified within each time bucket. There is a periodic GAP and cumulative GAP for each time bucket. The cumulative GAP compares RSAs with RSLs over all time buckets from the present through the last day in each successive time bucket.

AEA = Average Earning Assets

As prescribed by NRB, GAP analysis model is used to measure IRC exposure. This model compares the impact of change in the value of FI's assets that re-price within an interval and liabilities that re-price within the same time frame on net interest margin (NIM). The sign of FI's GAP further indicates whether interest income or interest expense will likely change more when interest rate changes. A positive GAP indicates that the FI has more RSAs than RSLs (RSA>RSL) across sometime interval. When rates rise, interest income increases more than interest expenses because more assets are repriced. As a result, NII increases and when rates decrease, opposite effect takes place because interest income falls more than interest expense and which results in decrease NII. Such a FI said to be asset sensitive.

A negative GAP indicates that the FI has more RSLs than RSAs (RSA<RSL). When interest rate rise during the time interval, the FI pays higher rates on all repriceable liabilities and earns higher yields on all repriceable assets. If interest rates rise on noth RSAs and RSLs by equal

amounts at the same time, both interest income and interest expense rise, but interest expense rises more because more liabilities are repriced. NII thus declines, as does the FI's NIM. When interest rates fall during the interval, more liabilities than assets are repriced at the lower rate such that interest expense falls more than interest income falls. In this case, both NII and NIM increase. Such a FI is said to be liability sensitive.

If a FI has zero GAP, RSAs equal to RSLs (RSA = RSL) and equal rate changes do not alter NII because changes in interest income and interest expenses are equal.

# **Composite rating:**

After understanding of all CAMELS components there is need for understanding of composite rating which is to be assigned to all banks. Composite rating takes place on the basis of evaluation and rating of six components. This rating is like qualitative analysis rather than quantitative analysis, it is not to be assigned on arithmetic average of all components rating (Trautmann, 2006, p.44). Composite rating assigns on 1 to 5 numerical scales, where "1" is the highest rating for the bank, which shows bank strongest performance whereas rating "5" shows the lowest rating and worse performance of the bank. When composite rating is assigned to each component the result will be disclosed to senior management and to the board of directors (Comptroller's Handbook, 2007, p. 53).

# **Composite rating 1:**

Composite rating '1' denotes strong position of the bank. Assigning of this rate shows the soundness and strongest performance of the bank in all aspects, and usually given to the banks who are rated 1 or 2 in almost all components. Management and board of directors are strong enough to handle weaknesses easily and can control risk associated with the business activities and to deal with complex situations. Fundamental risk

management practices of the bank are strong enough and minimum level of supervisory is needed for the bank (Trautmann, 2006, p.45).

# **Composite rating 2:**

Composite rating '2' is usually given to fundamentally and financially strong banks and usually have component rating not more than 3. At this position banks are stable and have the capability to hold out the economic depression. Management and board of directors have good enough hold to rectify the moderate weakness of the bank at this stage. Risk management practices of the bank are not strong enough but are at satisfactory level and supervision is required to guide the bank towards strong position (Trautmann, 2006, p.46).

# **Composite rating 3:**

Composite rating '3' shows that the bank has weaknesses in different component areas. Proper concentration is required at this stage and if it is not provided it may lead the bank towards liquidity or bankruptcy. More than 2 rating components of the banks are above 3 rating. Management of the bank does not have the ability to control the situation and to find out the way to guide the banks out of the weaknesses. There is evidence of significant noncompliance of the bank with regulatory requirements. Risk management performance is less satisfactory, such bank require more than normal supervision from regulatory authorities. Proper guidance from the regulatory authorities will help the management to identify the weaknesses and guide towards improved performance. Bankruptcy is unlikely but overall financial position of the bank need proper supervision (Trautmann, 2006, p.47).

# **Composite rating 4:**

Composite rating '4' of a bank under examination shows risky and unstable performance of the bank. Unsatisfactory performance of banks is mostly because of managerial or financial insufficiencies. At this stage management of the bank and its board of directors are unable to take hold on flaws and weaknesses to resolve the problem. Most of it components ratings are above three and 1 or 2 of them are in 5 as well. The violation of Law and regulations is on rise and risk management practices are not acceptable at this stage. There is a need of corrective action and proper supervision and if an immediate supervision action is not taken the result may be solvency of the bank (Trautmann, 2006, p.48).

# **Composite rating 5:**

Composite rating '5'indicate extremely unsound, risky and unstable performance of the bank. Usually risk management practices of the bank are insufficient. Management and board of directors are totally failed to take control on weaknesses. Most of its components are rated 4 and 5 and usually have negative earnings. At this stage continues supervision is required from the regulators and financial assistance from outside is much needed to avoid the highly probable bank failure (Trautmann, 2006, p.49).

# **2.2 Research Review**

This sub-chapter presents the research studies done previously in the related area of the study conducted by different scholars. It includes national and international research papers, journals, master dissertations etc. which are relevant to study.

# 2.2.1 Review of research papers

Barker and Holdsworth (1993). have concluded in their paper that CAMEL rating system can be used as early warning system to detect bank failure even after controlling for a wide range of publicly available information about the condition and performance of banks.

Cole and Gunther (1995). Conducted the research on "Predicting Bank Failures: A Comparison of On- and Off-site Monitoring System" and found the information contained in CAMEL rating decays quickly with respect to predicting bank failure from 1986 to 1992. In particular, they found that a model using publicly available financial data is a better indicator of the likelihood of bank failure than the previous CAMEL rating that are more than two quarters old. These two studies address the issue on information decay directly; however, the primary purpose of CAMEL rating is not to identify future bank failures; but to provide an assessment of bank's overall conditions at the time of the examinations.

Berger, Davies and Flannery (2000). Found in their research paper that assessments by supervisors and rating agencies are complementary but different from those by the stock market. In contrast, supervisory assessments and equity market indicators are not strongly interrelated. Furthermore, supervisory assessments are generally less accurate than either stock or bond market indicators in predicting future change performance.

Derviz and Podpiera (2004). Investigated the determinants of the movements in the long term S&P and CAMELS bank ratings in the Czech Republic during the period of 1998 to 2001. An ordered response logic model to analyze the monthly long-run S&P rating and a panel data framework to analyze the quarterly CAMELS rating were used. The significant predictors for S&P ratings are Credit Spread, Capital Adequacy, Total loans to Total Assets and Total assets Value at Risk are found to be significant predictors. Besides these, the verified determinants can be predict the S&P rating one month in advance.

Baral (2005). carried out a research study on "Health Check-up of Commercial Banks in the Framework of CAMEL: a Case Study of Joint Venture Banks in Nepal". It has covered four fiscal years period from 2001to 2004. For the purpose of the study 3 banks: NABIL, NSBI and SCBL were selected. The study was based on historical data disclosed by annual reports of joint venture banks and NRB in its supervision annual reports. The study concluded that the financial health of joint venture banks is better than that of the other commercial banks. The study further indicates that the CAMEL component indicators of the joint venture banks are not so strong to manage possible shocks though the earning performance of the joint venture banks was fair.

Dang (2011). Carried out a study on "The CAMEL rating system in banking supervision: A case Study". The findings revealed that the CAMEL rating is significant to banking supervision and is currently popular among regulators worldwide. Its approach is beneficial as it is an internationally standardized rating, and provides flexibility between on-site and off-site examination; hence, it is the dominant model in assessing banks' performance. The discussion continued to explore how CAMEL model is similar to Basel Accords. The results showed that they are remarkably similar, but the difference is that Basel is more popular in Europe than in U.S. In regard to the situation of Europe, it is in need of a proper tool to deal with financial risks in the market.

Jha and Hui (2012). conducted a research on "A Comparison of Financial Performance of Commercial Banks: A Study of Nepal". In their research paper, they aimed to measure the best performance among the commercial banks and to find out the relationship between bank specific factors (Ratios) on the banks' performance. They divided the commercial banks into three separate groups based on ownership namely, (i) public sector banks, (ii) joint venture banks, and (iii) domestic private banks. They made hypothesis to examine the relationship between CAMEL components and performance of the banks; and they considered ROE and ROA (profitability ratios) as dependent variables, which each was examined separately with same explanatory variables that was, CAR, NPL, IETTL, NIM, CDR. They found that the same bank had different ranks under the different financial ratios. The ROAs of public sector banks due to having utmost total assets but the overall performance of public sector banks was not

observed sound because other financial ratios including ROE, CDR, and CAR of most of the joint venture and domestic public banks were found superior.

## 2.2.2 Review of Dissertations

Shakya (1995). Performed a study on "Financial Analysis of Joint Venture Banks in Nepal". The objective of this study was to carry out the comparative financial performance evaluation of Nepal Arab Bank Ltd.(Nabil) and Nepal Grindlays Bank Ltd. (NGBL). This study had covered the time period of FY1988/89 to FY 1993/94. In this study, researcher has been used the financial ratios like liquidity, leverage, activity, profitability, growth, valuation and financial ratios like Karl Pearson's Correlation Coefficient, t-test, simple average and index. The researcher has found that the performance measure in terms of deposit utilization rate is not satisfactory in spite of the increment in loans and deposits of both banks. Further the study showed that financial performance of Nabil is better than that of NGBL.

Deoja (2001). Conducted "A Comparative Study of the Financial Performance between Nepal State Bank of India Ltd. (NSBIL) and Nepal Bangladesh Bank Ltd. (NBBL)." The objective of the study was to analyze the trend of deposits, loan and advances, liquidity, profitability, capital structure, turnover and capital adequacy position of NSBIL and NBBL. The researcher found that the cash and bank balance to current assets, saving deposit to total deposits, loan and advances to current assets of NBBL are higher and NBBL has better turnover than NSBIL in terms of loan and advances to total deposits ratio and loan and advances to fixed deposit ratio.

Sharma (2005). carried out the research study entitled, "Finance Companies in Nepal" with the main objective of presenting the up to date

study on the growth of finance companies in Nepal and analyzing the assets and liabilities structure of finance companies in Nepal. The study was based on data from mid-July 1997 to mid-Jan 2004. The study as per its nature was largely based on secondary data. He has employed simple statistical tools and financial ratios to analyze the data and present the position of finance companies. The study concluded as the growth of finance company is very speedy. The deposits constituted as the major source and the capital fund remained in second. It is seemed that public deposit remained the major source of fund of finance companies. The liquidity position of finance companies remained higher the legal limit.

Bhandari (2006). conducted the research study entitled "Financial Performance Analysis of Himalayan Bank Ltd. In the Framework of CAMEL" with an objective to examine the financial performance of Himalayan Bank Ltd. (HBL). The financial data of 1999 to 2004 extracted from the secondary source was analyzed through descriptive approach. Financial tools like capital adequacy ratio, NPL ratio, loan loss ratio, ROE, net interest margin, NRB balance to total deposit ratio etc. were used by the researcher. The major findings of the study are that bank has maintained adequate capital, NPL though in decreasing trend is still matter of concern, satisfactory ROE, however in decreasing trend, decreasing trend of net interest margin shows the management slack monitoring over the bank's earning assets, liquid funds to total deposit ratio is above the IAR whereas NRB balance and cash in vault to total ratios are below the IAR.

Chand (2006). conducted a study on "Financial Performance Analysis of NABIL Bank Limited in the framework of CAMELS". The main objective of the study was to analyze the financial condition of the bank. The study has covered only five fiscal years 2000/01 to 2004/05. The study was based on secondary data. Some financial and statistical tools and descriptive techniques are applied to evaluate the financial performance of the bank. He found that the capital adequacy of the bank were above the NRB standards in all years. The non-performing loan to loan ratios were all

below the industrial average and the international standard. The loan loss provision of the bank is decreasing constantly the year, which shows the management was able to decrease the portion of problematic loan. Total expenses to total income ratio and earning per employee was favoralble to the bank. The earning quality ratios were generally above the benchmark prescribed by world bank. The overall liquidity position of the bank was in good condition. The cumulative gap of risk sensitive assets and risk sensitive liabilities, re-priced over the over-maturity bucket was in continuous decreasing trend. The interest rate sensitivity ratio to the total earning assets over the short term horizon was in decreasing trend.

Bhandari (2006). Has conducted a study on the "Financial performance of Himalayan Bank Ltd. (HBL) in the framework of CAMEL" The main objective of the study is to analyze the financial performance of HBL in the framework of CAMEL. The study covered the period of six fiscal year FY1999/00 to 2004/05. The researcher has been used secondary data and made descriptive study using statistical as well as financial tools. In the study, the researcher found that the capital adequacy ratio of the bank was above NRB standard in all the year except FY2004/05. The supplementary capital ratio was within the boundary of NRB standard during the study period. The non-performing loan to total loans and advance ratios for the study period was in decreasing trend but it was not sufficient in banking industry. Loan loss provision was increasing rapidly due of problematic loan. The ROE and ROA was better the NRB standard. Liquidity position of the bank was above the NRB standard and industry average. EPS was fluctuating over the period but the researcher concluded as better position. NRB balance to deposit ratio and Vault to deposit ratio were under the industrial average. He recommended to follow strictly the directives issued by NRB in respect to capital adequacy and balance that must hold in vault.

Gurung (2007). Performed the research study entitled "Financial Performance Analysis of Annapurna Finance Company Limited in the Framework of CAMEL". The study was based on secondary data covering

the period of five fiscal years FY 058/59 to FY062/63 B.S. She has used various financial and statistical tools to analyze the data. The basic objective of the study was to analyze the financial performance of AFCL through CAMEL Framework. She has following a case study research design. The study concluded that the company is financially sound and strong. The company is running with adequate capital and strictly followed the NRB directives. The capital fund of the company is sound and sufficient to meet the financial operation as per the NRB standard. The company has placed efficient credit management and recovery efforts though the amount of non-performing loans and possibility of default in future is increasing. The company has maintained only the adequate level of cash in vault to minimize risk but which is sufficient to meet NRB standard.

Devkota (2008). conducted the research study on the "Financial Performance Analysis of Fewa Finance Company Limited in the framework of CAMEL" with the objective of analyzing financial performance in the framework of CAMEL. The study was covered only four fiscal years from FY2060/61to FY2063/64 based on secondary data. The analysis had been made to compare the company's ratios with NRB standard, trend of ratios and industrial average. The researcher concluded that the company has maintained adequate capital as per NRB standards over the study period. In spite of large amount of lending, the company has low portion of non- performing loan due to efficient credit management and recovery efforts. ROE, ROA & EPS were fluctuating trend but all of them are above industrial average. Liquid assets to total deposit ratio, NRB balance to total deposits ratio and Cash in vault to total deposit ratios were found below the industry average but the company has held the balance as required by NRB all the fiscal years.

Tiwari (2010). Conducted a research study on "Financial Performance analysis of Pokhara Finance Company Ltd. In the framework of CAMEL". The study was based on the secondary data of FY2061/62 to FY 2065/66.

The main objective of the research was to analyze the financial condition of PFCL in the framework of CAMEL. He analyzed the level, trend and comparative analysis of capital adequacy, non-performing loans, loan loss provision & asset composition, management quality ratios, earning capacity, liquidity position and sensitivity to market risk components of the company during 5 years of period. He concluded that the company is running in adequate capital and capital fund of the company is sound. Portion of Non-performing loan are increasing but he concluded that the management decision related to operation and investment have assisted in controlling and recovery of bad debt. ROE and ROE have been increasing trend, which helped the company to increase market strength. Sometime the company was very low liquidity position, which was not adequate to maintain NRB standard. The company has able to match the risk sensitive assets to risk sensitive liabilities in long term maturity bucket and therefore interest rate changes has no effect on them.

Shrestha (2011). conducted a research study in "Financial Performances is of Machhapuchchhre Bank Ltd. in the framework of CAMEL", with the objective of analyzing the financial performance of MBL through CAMEL framework. He has taken the secondary data from FY062/063 to 066/067 in his study. In his study, he has found that the bank has maintained adequate capital adequacy ratio in the study period. NPL of the bank has found in the range of 0.28%-2.64%, which reflects good performance of the bank in mobilizing loan and advances. EPE, ROA, ROE, NIM, EPS is in decreasing trend. Liquidity position of the bank is above industrial average. Increasing trend of loan loss ratio shows that NPL & possibility of defult in future is increasing. He has recommended to maintain stable capital adequacy ratio for financial sustainability. Bank should give attention to minimize NPA and to reduce expenses. It should implement corrective action to increase income ratios. As the liquidity position of the bank is found to be high, excess liquidity fund should be mobilized by adopting effective investment policy, which can generate profit for the bank.

Rana (2012). conducted a study on "Financial Performance of Nepal SBI Bank Ltd. In the framework of CAMEL". Main objective of the study is to analyze financial performance of Nepal SBI Bank Ltd. through CAMEL components. The study has covered the data from FY2062/063 to FY2066/067. In the study, researcher found that the bank has maintained sufficient capital adequacy ratio, NPL is decreasing. LLP was found to be in decreasing and somewhat consistent. Higher increasing trend of expenses than the trend of income reflects poor management quality. ROA, ROE, NIM fluctuating whereas EPS is in increasing trend. Liquidity position has maintained as per NRB standard. The researcher has recommended to maintain stable adequacy ratio and to take corrective actions to reduce operating expenses, to increase income by investing the fund in high income generating sector, to control unnecessary expenses etc. EPE is decreasing while no. of employee is increasing, so the researcher has suggested to give serious attention to recruiting department while recruitment.

#### 2.3 Research Gap:

After reviewing the above studies, it is found that the researchers are focused on the performance evaluation of the commercial banks and financial institutions. Profitability, liquidity, and leverage are taken as the main indicators to measure the financial performance of bank and FIs but it seems inadequate to disclose the real financial condition of the bank and FIs. Therefore, the mechanism which can analyze the overall financial performance of the bank and FIs appropriately, effectively and uniformly can be regarded as CAMELS because it rates the bank in break up from every aspect such as capital adequacy, asset quality, management efficiency, earning, liquidity and sensitivity to market risk. Similarly, it addresses risks associated with credit, market and operation, which if neglected cause to bank and FIs failure. There are various studies have

been carried out on financial performance analysis in the framework of CAMEL by different research scholars. However, in the framework of CAMELS has been conducted in very few numbers. A researcher Ms. Laxmi Devkota had been conducted a study of FFL in the framework of CAMEL in 2008 A.D. The study had been carried out five years ago and had covered only four fiscal years from FY2060/61 to FY2063/64 B.S. One of the important component 'Sensitivity to market risk (S)' was missing in that study. Thus, this study attempts to analyze the financial performance of Fewa Finance Limited In the framework of CAMELS.

## **CHAPTER III**

# **RESEARCH METHODOLOGY**

The research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view (Kothari, 1994). The purpose of this chapter is to discuss the method of research followed in this study. It presents the methods and procedures applied in the study for collecting, analysis and presentation of data. It specifies the data, tools, techniques, logics, criteria etc. that are relevant for the study. It includes the following methodologies.

#### **3.1 Research Design**

This study is a case study in nature. A true research design is basically concerned with various steps to collect the data for analysis and draw a relevant conclusion. Recommendation is another important aspect of design strategy. The research design allows the researchers to take and appropriate measure and direction towards the predetermined goals and objectives. A research design is the arrangement of conditions for the collection and analysis of data in a manner to combine relevance to the research purpose with economy in procedure. Research design is the plan, structure and strategy of investigation imagines obtaining answers to research questions and controlling various things (Sharma, 2064). Descriptive -cum analytical research design involves the process of describing the characteristics of particular problem using analytical tools

to find out the fact. In the research, adequate information are gathered and conclusions are drawn after analysis.

## **3.2 Population and Sample**

The population of the study consists of all the finance companies functioning in Nepal. But, being the case study, only one finance company i.e. Fewa Finance Ltd. (FFL) is taken as a sample for the study out of 69 Finance Companies as on Ashad-end 2069. For the sample purpose, convenience sampling method is used.

#### 3.3 Nature and Sources of Data

This study is mainly based on secondary data. The major sources of data are annual reports of FFL and official websites. Similarly, other required information are obtained from NRB reports, directives and publications, journals, bulletins, newspapers, websites etc.

### **3.4 Data Collection Procedure**

Field visit to concern places was made in order to gather various information relevant for this study. The annual reports and some internal data of FFL were collected from its Head Office, Chipledhunga, Pokhara and additional information was extracted from its official websites. The supplementary data and information have been acquired from various sources like newspaper, magazines, brochures, booklets, periodicals and bulletins, published and unpublished reports, related documents and journals available in Western Regional Library, Pokhara and Central Library (T.U.) as well as various websites.

#### **3.5 Data Processing**

The Financial data from the annual reports of the company were compiled in a master sheet. Then, they were entered into the spreadsheet to workout the CAMELS financial ratios using computer program like Microsoft Excel.

### **3.6 Data Analysis Tools**

Methods of analysis are applied as simple as possible. The obtained data are presented in various tables, diagrams and charts with supporting interpretations. Among various tools of data analysis, financial tools and statistical tools are used to analyze the data.

### **3.6.1 Financial Tools**

Financial tools are used for expressing the mutual relation of different accounts consisting in the financial statement. To make the data of financial statement more clear and meaningful conclusion, it is to be expressed in referring to other figures. Various types of financial ratios have been categorized under each component of CAMELS and data has been analyzed on a comparative (Standard) basis in order to analyze the company's financial condition and performance efficiency.

### 3.6.1.1 Capital Adequacy Ratio

**Core Capital Adequacy Ratio:** Core capital adequacy ratio is used to assess the FI's adequacy of core capital to address different types of risks. This ratio expresses the relationship between the total core capital and total risk weighted assets. It is calculated by using the following formula.

$$CCAR = \frac{Core\ Capital}{Total\ Risk\ Weighted\ Assets} \times 100$$

Where,

#### CCAR = Core Capital Adequacy Ratio

Core Capital = Paid up equity share capital + Irredeemable Noncumulative preference shares + Share Premium + General Reserve + Accumulated Profit + Capital Redemption Reserve + Capital Adjustment Reserve + Dividend Equalization Reserve + Other Free Reserve -(Goodwill + Fictitious Assets + Investment in equity in licensed FIs + Investment in equity of institutions with financial interests + Investment in equity of institutions in excess of limits + Investments arising out of underwriting commitments + Reciprocal crossholdings + Other deductions)

Total Risk Weighted Assets = On-Balance Sheet Risk Weighted Assets + Off-Balance Sheet Risk Weighted Assets

**Supplementary Capital Adequacy Ratio:** This ratio indicates the contribution of supplementary capital in capital adequacy. This ratio shows the relationship between total supplementary capital and total risk weighted assets. Following formula is used to calculate the supplementary capital adequacy ratio.

$$SCAR = \frac{Supplementery\ Capital}{Total\ Risk\ Weighted\ Assets} \times 100$$

Where,

Supplementary Capital = Cumulative and/or Redeemable Preference Share + Subordinated Term Debt + Hybrid Capital Instruments + General Loan Loss Provision + Exchange Equalization Reserve + Investment Adjustment Reserve + Other Reserves

**Capital Adequacy Ratio:** This ratio is used to evaluate the adequacy of capital in the FI by means of the proportionate relationship between total capital fund and total risk weighted assets. It is expressed as:

$$CAR = rac{Total \ Capital \ Fund}{Total \ Risk \ Weighted \ Assets} \times 100$$

Where,

CAR = Capital Adequacy Ratio

Total Capital Fund = Core Capital + Supplementary Capital

#### **3.6.1.2** Assets Quality

**Past Due Loans to Total Loans Ratio:** This ratio measures the proportion of past due loans in total loans. A higher past due loan ratio above IAR indicate better quality of assets and vice-versa. It is determined by the following formula.

Past Due Loans to Total Loans Ratio =  $\frac{Past Due Loans}{Total Loans and Advances} \times 100$ 

**Non-Performing Loan Ratio:** This ratio shows the relationship between non-performing loan and total loans. It measures the quality of asset as to what extent the assets are non-performing out of the total loan and advances. A low or decreasing ratio of NPL below IAR indicate better quality of assets and vice-versa. It is calculated by using the following model.

$$NPLR = \frac{Non - Performing \ Loan}{Total \ Loan \ and \ Advances} \times 100$$

Where,

NPLR = Non-Performing Loan Ratio

Non-Performing Loan = Loan not recovered within the given timeframe either in the form of interest servicing or principal repayment

Loan Loss Provision to Total Loans Ratio: This ratio implies the percentage of loan loss provision in the total loans. It is determined as follows.

$$LLPR = \frac{Loan \ Loss \ Provision}{Total \ Loan \ and \ Advances} \times 100$$

Where,

LLPR = Loan Loss Provision Ratio

#### **3.6.1.3 Management Efficiency**

**Total Expenses to Total Income Ratio:** This ratio is used to judge the proportion of total expenses in total revenues. A low or decreasing ratio of expenses to total revenues indicates efficiency of management in the operation of the bank as it has positive effect on profitability. It is determined by the following model.

Total Expenses to Total Income Ratio = 
$$\frac{Total \ Expenses}{Total \ Income} \times 100$$

Where,

Total Expenses = Interest Expenses + Staff Expenses + Other Operating Expenses + Foreign Exchange Loss + Provision for Possible Losses + Non Operating Expenses + Provision for staff bonus + Provision for Taxation

Total Incomes = Interest Income + Commission and Discount + Other Operating Income + Foreign Exchange gain + Non Operating Income + Write back of Provision for Possible Loss

**Earning Per Employee:** This ratio shows the relationship between NPAT and total number of employees. Low or decreasing earnings per employee reflects inefficiencies as a result of overstaffing with similar repercussions in terms of profitability (IMF, 2000). It is determined by using the following formula.

$$EPE = \frac{NPAT}{Total Number of Employees}$$

Where,

EPE = Earning Per Employee

NPAT = Net Profit After Tax

#### **3.6.1.4 Earning Performance**

**Return on Equity (ROE):** This ratio shows the relationship between net profit and capital. It provides information about the rate of return to be received by the shareholders as to the proportion. Higher the return on

investment, better will be the health of the company. It is expressed as follows.

$$ROE = \frac{NPAT}{SE} \times 100$$

Where,

ROE = Return on Equity

NPAT = Net Profit After Tax

SE = Shareholders' Equity = Paid up Capital + Reserve and Funds

**Return on Asset (ROA):** ROA is the expression of numerical relationship between NPAT and total assets. This ratio measures the return from the total asset invested. Therefore, higher profit return on total assets is considered good. It shows optimum utilization of the resources. The formula to calculate ROA is given by:

$$ROA = \frac{NPAT}{TA} \times 100$$

Where,

ROA = Return on Assets

NPAT = Net Profit After Tax

TA = Total Assets

**Net Interest Margin (NIM):** This ratio express the relationship between the difference of interest incomes and interest expenses to earning assets. Earning assets are those, which generates interest or fee income. Principally, the loan and investment on securities made by the company falls under earning assets. Following model is used to determine net interest margin.

$$NIM = \frac{NII}{Earning \ Assets} \times 100$$

Where,

NII = Net Interest Income = Interest Incomes – Interest Expenses

Earning Assets = Loan and Advances + Investment on Securities + Bills Purchased and Discounted

**Earning Per Share(EPS):** EPS measures how much return can be earned from eah share by the common shareholders. Higher the EPS, better will be the market position of the company. It is calculated by following formula.

$$EPS = \frac{NPAT}{Number of Common Shares}$$

Where,

EPS = Earning Per Share

NPAT = Net Profit After Tax

# **3.6.1.5 Liquidity Position**

**Compulsory Reserve Ratio (CRR):** FIs are required to keep certain percentage of their total deposit as CRR in NRB. This percentage of CRR is determined by the NRB and can be changed as per the requirement in order control the credit expansion capacity of the FI.

**Total Loan to Total Deposit Ratio:** This ratio shows the relationship between total loan and total deposit. It is calculated as follows.

 $Total \ Loan \ to \ Total \ Deposit \ Ratio = \frac{Total \ Loan \ and \ Advances}{Total \ Deposits} \times 100$ 

**NRB Balance to Total Deposit Ratio:** This ratio shows the relationship between NRB balance and total deposit of FI and is calculated as follows.

 $NRB \ Balance \ to \ Total \ Deposit \ Ratio = \frac{NRB \ Balance}{Total \ Deposits} \times 100$ 

Where,

NRB Balance = Balance with Nepal Rastra Bank

**Cash in Vault to Total Deposit Ratio:** This ratio measures the proportion of cash in vault to total deposit. It can be expressed as follows.

Cash in Vault to Total Deposit Ratio = 
$$\frac{Cash in Vault}{Total Deposits} \times 100$$

Where,

**Liquid Assets to Total Deposit Ratio:** This ratio shows the numerical relationship between liquid assets and total deposits. It is used to judge the short-term liquidity position of the FI. Higher the ratio, better will be the liquidity position and vice-versa. It is determined by using the following formula.

$$Liquid\ Assets\ to\ Total\ Deposit\ Ratio = \frac{Total\ Liquid\ Assets}{Total\ Deposits} \times 100$$
Where,

Total Liquid Assets = Cash in hand + Balance with NRB + Balance with Domestic FIs + Balance with Foreign Bank & FIs + Money at call or Short Notice + Investment in government Securities

#### **3.6.1.6 Sensitivity to Market Risk**

Interest Rate Sensitivity: Interest rate risk is one of the major risk as the change in interest rate can significantly alter the NII of the FIs. Interest rate sensitivity can be measured by GAP Analysis. Gap analysis is essentially a balance sheet concept. If  $\Delta Ri$  is the average interest rate change affecting assets and liabilities that can be re-priced with i<sup>th</sup> maturity bucket, the effect on the FI's NII in the i<sup>th</sup> maturity bucket is calculated by (Sauders and Cornett, 2004):

$$\Delta \text{NIIi} = \left(\sum_{i=1 \text{ Day}}^{i=1\text{ th Maturity bucket}} \text{RSAi} - \sum_{i=1 \text{ Day}}^{i=1\text{ th Maturity bucket}} \text{RSLi}\right) \times \Delta \text{Ri}$$

= GAPi  $\times \Delta Ri$ 

Where,

 $\Delta NIIi =$  The expected change in net interest income in the i<sup>th</sup> maturity bucket.

RSAi = Rate sensitive assets in i<sup>th</sup> maturity bucket

RSLi = Rate sensitive liabilities in i<sup>th</sup> maturity bucket

GAPi = rupee size of gap between book value of rate sensitive assets and rate sensitive liabilities in the i<sup>th</sup> maturity bucket Similarly, Cumulative GAP (CGAP) of interest is the re-pricing gap over all time buckets from the present through the last day in each successive time bucket. The maturity bucket is the time window over which the amounts of assets and liabilities are measured.

 $\Delta NIIi = CGAPi \times \Delta Ri$ 

Where,

$$CGAPi = (\sum_{i=1}^{i=90} \sum_{Days}^{Days} RSAi - \sum_{i=1}^{i=90} \sum_{Days}^{Days} RSLi) + (\sum_{i=91}^{i=180} \sum_{Days}^{Days} RSAi - \sum_{i=91}^{i=180} \sum_{Days}^{Days} RSLi) + (\sum_{i=181}^{i=270} \sum_{Days}^{Days} RSAi - \sum_{i=181}^{i=270} \sum_{Days}^{Days} RSLi) + (\sum_{i=271}^{i=365} \sum_{Days}^{Days} RSAi - \sum_{i=271}^{i=365} \sum_{Days}^{Days} RSLi)$$

Interest rate sensitivity is expressed as the proportion of Cumulative GAP in total risk sensitive assets (A):

Interest Rate Sensitivity Ratio = 
$$\frac{CGAP}{A} \times 100$$

#### **3.6.2 Statistical Tools**

The collected statistical data i.e. numerical facts and figures as well as their relationship can be analyzed by using the following tools.

**Average:** A single value which is representative of the whole data is called an average. A simple arithmetic average is usually called the mean. A simple arithmetic average is a value obtained by dividing the sum of the values by their numbers (Kothari, 2004). Average can be calculated as follows:

$$\overline{X} = \frac{\sum X}{n}$$

Where,

 $\overline{X}$  = Simple Arithmetic Mean

 $\sum X$  = Summation of individual value

n = number of observation

**Standard Deviation:** Standard deviation is considered as the best method for measuring dispersion. Standard deviation is the positive square root of the variance. It is an absolute measure of variability. Higher value of standard deviation denotes higher variability of less consistent and vice-versa. It is determined as follows.

$$\sigma = \sqrt{\frac{\sum (x - \overline{x})^2}{n}}$$

Where,

 $\sigma$  = Standard Deviation

X = Individual value

 $\overline{x}$  = Simple arithmetic mean

n = number of observation

**Coefficient of Variation:** Coefficient of variation is the ratio of the standard deviation to the mean. It is a relative measure of variability. It is more useful while comparing two or more sets of data. As the coefficient of

variation increases, so does the variability and vice-versa. Coefficient of variation can be calculated as follows:

$$CV = \frac{\sigma}{\overline{x}}$$

Where,

CV = Coefficient of Variation

 $\sigma$  = Standard Deviation

 $\overline{x}$  = Simple arithmetic mean

**Least Square Trend Method:** It is a statistical method that fits a trend line to a set of data obtained from past observation and project the line for the future trend. This method results in a straight line that minimizes the sum of squares of the vertical difference or distance from the line to each of the actual observations. The general equation used for trend is given below:

$$Y = a + bX$$

Where,

Y = Dependent Variable

a = Y - intercept

b = Slope of Trend Line

X = independent Variable (Coded time in year)

Using least square method, the value of 'a' and 'b' can be computed as follows:

$$b = \frac{\sum XY - n\overline{X}\,\overline{Y}}{\sum X^2 - n\overline{X}^2}$$
$$a = \overline{Y} - b\,\overline{X}$$

Where,

n = Number of observation

$$\overline{X}$$
 = Mean of X values, i.e.  $\frac{\Sigma X}{n}$   
 $\overline{Y}$  = Mean of Y values, i.e.  $\frac{\Sigma Y}{n}$ 

#### 3.7 Limitations of the Methodology

The analysis depends on annual based data, but effectiveness of CAMELS assessment requires quarterly financial reports. The outcomes obtained from the study of financial performance analysis of FFL may not represent the overall condition of all the finance companies. Despite the management component is a qualitative factor, the proxy financial tools are used to measure the management efficiency. Regarding reliability of the data, company's audited annual reports are treated as authentic.

# **CHAPTER IV**

# PRESENTATION AND ANALYSIS OF DATA

This chapter constitutes the most crucial part of the study. It provides mechanism for meeting the basic objectives stated earlier in the first chapter of this research. The research has followed the methodology described in the third chapter in order to attain the objectives. Keeping in view the objective and nature of the problem, this chapter describes how the collected data has been presented and analyzed using various financial and statistical tools so as to reach at the meaningful findings.

### 4.1 Data Presentation and Analysis

In order to achieve the objective of finding out the financial performance of FFL in the CAMELS framework, the data (extracted from annual reports as well as worked out) presented in the table and figure are analyzed under each component of CAMELS. Then, the findings are drawn out on the basis of analysis.

# 4.1.1 Capital Adequacy

The deference between total assets and total liabilities is called capital. It shows ability of the firm that liability could be privileged. It assumes that if all the assets of the FI take as a loans and deposits as liability. If there is any loss from loans it will be a great risk for FIs to meet the demand of their depositors. Therefore to prevent the company from failure it is necessary to maintain a significant level of capital adequacy. Capital adequacy reflects the capability of the bank and FI's to maintain required level of capital so as to address the risks as well as to meet legal requirement which in turn facilitate smooth operation of the bank and FI and build confidence of its stakeholders. Capital adequacy indicates the effect of capital on functioning of the FI. Capital plays the balancing role between risk and return of the FI. In case of inadequate capital, the

tendency of risk increases causing interruption in the operation and taking towards bank failure. On the contrary, the adequacy of capital relative to risk profile strengthen the capability of the FI to absorb risk of losses and prevent from failure.

# 4.1.1.1 Core Capital Adequacy Ratio

Core capital is also known as primary capital or Tier 1 capital. Core capital includes the sum of paid up capital, share premium, non-redeemable preference share, general reserve, accumulated profit (loss), capital redemption reserve, capital adjustment fund and other free reserve by deducting goodwill (if any). Core capital adequacy ratio (CCAR) measures the proportion of core capital in the total risk weighted assets in order to determine its adequacy. The adequacy of core capital indicates that the shareholder's fund is sufficient to manage risks and to maintain financial soundness of the bank and FIs. Higher CCAR indicates better capital maintenance by the bank and FIs and vice versa. However, NRB, as a central bank and supervisory authority of banks and FIs of Nepal used to specify minimum standard.

The table given below provides information regarding CCAR of FFL during the study period and minimum core capital standard set by NRB.

FY	Core Capital	RWA	CCAR	Min. NRB	Excess /
(Ashad End)	(Rs.)	(Rs.)	(%)	Std. (%)	(Short) (%)
2064/065	104.16	872.76	11.93	5.5	6.43
2065/066	172.26	1169.51	14.73	5.5	9.23
2066/067	253.39	1735.58	14.60	5.5	9.10
2067/068	334.67	1956.83	18.09	5.5	12.59
2068/069	377.98	2295.32	16.47	5.5	10.97

 Table 4.1: Core Capital Adequacy Ratio

Rs. in Million

Source: FFL, Annual Reports

Table 4.1 shows the observed values of core capital adequacy ratio i.e. core capital to total risk weighted assets. During the study period, ratios are in the range of 11.93% to 18.09% and ratios are above the minimum NRB standard in all years, which shows that FFL has maintained sufficient CCAR in the study period. CCAR are in fluctuating trend. CCAR has been slightly decreased in FY2066/067 and FY2068/069 as compare to the previous FY's.



Fig. 4.1: Comparing Core Capital Adequacy ratio with NRB Standard

Fig.4.1 shows the comparison of core capital adequacy ratio with NRB Standard. During the study period, CCAR are above the minimum NRB standard in all the FYs. CCAR has declined in FY 2066/067 and FY068/069. The CCAR curve has raised upto the highest point of 18.09% in FY2067/068, which was at 11.93% in the beginning year of this study (i.e. FY2064/065).

### 4.1.1.2 Supplementary Capital Adequacy Ratio

Supplementary capital is also known as secondary capital or Tier II capital. Which includes loan loss provision for pass loan, assets revaluation reserve, hybrid capital instrument, unsecured subordinated term debt, exchange equalization reserve, additional loan loss provision, investment adjustment reserve and provision for loss in investment. Supplementary capital measures the proportion of supplementary capital in total RWA. The adequacy of supplementary capital shows greater support of supplementary capital in capital adequacy ratio. Higher SCAR not exceeding NRB standard indicates adequacy of supplementary capital to support maintaining minimum risk based total capital standard and vice versa, but according to NRB, supplementary capital should not be in excess to the amount of core capital.

FY	Supplementary	RWA	SCAR	Max.	Excess /
(Ashad End)	Capital (Rs.)	(Rs.)	(%)	NRB Std.	(Short) (%)
				(%)	
2064/065	10.91	872.76	1.25	11.93	(10.68)
2065/066	14.62	1169.51	1.25	14.73	(13.48)
2066/067	20.44	1735.58	1.18	14.60	(13.42)
2067/068	18.46	1956.83	0.94	18.09	(17.15)
2068/69	21.36	2295.32	0.93	16.47	(15.54)

**Table 4.2: Supplementary Capital Adequacy Ratio** 

Rs. in Million

Source: FFL, Annual Reports.

Table 4.2 exhibits the supplementary capital adequacy ratio of FFL, where SCAR are found to be 1.25%, 1.25%, 1.18%, 0.94% & 0.93% in FY2064/65 to FY 2068/69 respectively. During the study, the ratios are unchanged in first two year and later which are in decreasing trend. In all the fiscal years, SCAR is below the maximum NRB standard, which seems that the company is able to maintain the level (within the limit) of supplementary capital in the total capital.

Fig. 4.2: Comparing Supplementary Capital Adequacy Ratio to NRB Standard



In fig 4.2, the supplementary capital adequacy ratio curve shows the decreasing trend. As compared to the NRB standard, the SCAR curve is below NRB standard in all the study period.

### 4.1.1.3 Capital Adequacy Ratio

Sum of core capital and supplementary capital makes the capital of the finance company. Capital adequacy ratio measures the proportion of total capital in the total RWA. Which shows the capability of the finance company to maintain required level of capital that can address risk of losses and facilitate smooth financial operation of the company. Higher CAR shows the strong capital base to manage risk of losses and operational smoothness. On the contrary, lower CAR shows weak capital base to manage risk of losses and operational smoothness.

#### **Table 4.3: Capital Adequacy Ratio**

Rs. in million

FY	Total Capital	RWA	CAR	Min. NRB	Excess /
(Ashad End)	(Rs.)	(Rs.)	(%)	Std. (%)	(Short) (%)
2064/065	115.73	872.76	13.18	11.00	2.18

2065/066	186.88	1169.51	15.98	11.00	4.98
2066/067	273.82	1735.58	15.78	11.00	4.78
2067/068	353.13	1956.83	19.03	11.00	8.03
2068/069	399.33	2295.32	17.40	11.00	6.4

Source: FFL, Annual Reports.

While reviewing the data given in table 4.2, it is found that the capital adequacy ratio is in the range of 13.18% to 19.03%. FFL has maintained CAR above the minimum NRB standard in all the fiscal years of study period.

Fig. 4.3: Comparing Capital Adequacy with NRB Standard



In fig.4.3, capital adequacy ratio curve exhibits the fluctuating trend. In the beginning FY 2064/65, the ratio curve starts from 13.18% and which is raised upto highest point of 19.03% in FY 2067/68 and slightly declined to 17.40% in concluding FY 2068/69. The ratio curve is above the NRB standard in all the fiscal years, which shows strong capital base of the company.

## 4.1.2 Assets Quality

Assets quality determines the long term sustainability of the FI. Loan usually occupies greater part among the asset items. Asset quality deteriorates due to the various risks associated with loan default. These risks need to be managed on the basis of size, exposure and sensitive to FI's performance.

## 4.1.2.1 Classification of Loan

Credit risk results from the exposure in the normal course of lending with potential earnings volatility caused by borrower's inability or unwillingness to fulfill their contractual debt obligations. This inability to pay back the interest or principal within the stipulated time frame caused turnover or performing loan into NPL.

Past due loan to total loan measures the proportion of past due loan in total loan and advances. Lower past due loan ratio shows better asset quality and vice-versa. The ratio of NPL to total loan and advances presents the percentage of NPL in total loan and advances. Lower NPL ratio indicates better quality of assets of performance of loans and vice-versa. Pass loan categories as performing loan, where, NPL includes sub-standard, doubtful and loss (bad) loans.

Table 4.4 presents the classification of loan portfolio in pass, sub-standard, doubtful and bad loans with their percentage in the total loan. The non-performing loan should be less than 5 percent (IMF 2000). In general 5 percent to 10 percent of NPL can be considered as satisfactory level of quality of bank assets.

# Table 4.4: Ratio of classified loan of FFL

Rs. in million

FY	206	4/65	206	5/66	206	6/67	2067/68		2068/69	
Loan	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
	(Rs.)	(%)	(Rs.)	(%)	(Rs.)	(%)	(Rs.)	(%)	(Rs.)	(%)
Pass	853.47	99.88	1121.51	99.78	1662.11	99.83	1846.37	99.48	2135.90	99.36
IAR*		95.89		98.11		98.46		94.57		89.93
NPL	1.02	0.12	2.42	0.22	2.80	0.17	9.73	0.52	13.77	0.64
IAR*		4.11		1.89		1.54		5.43		10.07
Sub- standard	-	-	-	-	-	-	-	-	-	-
Doubtful	-	-	-	-	-	-	-	-	-	-
Bad	1.02	0.12	2.42	0.22	2.80	0.17	9.73	0.52	13.77	0.64
Total	854.49	100	1123.93	100	1664.91	100	1856.10	100	2149.67	100

Source: \*NRB, Banking and Financial Statistics (2008 – 2012) & FFL Annual Reports.

In Table 4.4, the trend of Pass or performing loan to total loan ratio is fluctuating over the period. The ratios are in the range of 99.36% to 99.88%. Out of the total loans, pass loan is maximum in FY 2064/065 with 99.88% and minimum in FY 2068/69 with 99.36%. In comparison to aggregate performing loans relative to total loans of the financial companies, the ratio is above the IAR in all the fiscal years, which shows the loan quality of the company is better than industrial average. Regarding the NPL ratio of the company, there are no loans categorized as substandard and doubtful loan. All the NPL are falls under bad loans. The ratio of NPL varies from the lowest 0.12% in FY 2064/065 to highest 0.64% in FY 2068/069. As the NPL ratios are guite lower than international benchmark of 5.00%, which indicates the quite good asset quality. NPL is lower in all the fiscal years in comparison of IAR, which reflects the strong assets quality of the company and the company is succeeded to collect outstanding loan and recover the loan timely. But the trend of NPL is increasing in later fiscal years, which shows the management should give more concentrations to recover the loan timely.

#### 4.1.2.2 Loan Loss Provision Ratio

In principal, loan and advances extended by bank and FIs are repayable on demand. On the other hand, borrowers are subjects to repay the loan on time as mentioned in the agreement. But in practice, all loans are not recovered within the expiry of repayment period granted in normal course. Therefore, on the basis of outstanding loan and advances, bank and FIs maintain provision to loan default in future. The LLP ratio shows the adequacy of provision maintain by bank & FIs and effectiveness of loan recovery policies. Higher ratio of LLP implies higher portion of NPL in total loan and advances and vice – versa. Similarly, increasing trend of LLP ratio indicates more delays in collection of loan and weakness in loan recovery policies. On the contrary, decreasing trend of LLP ratio shows efficiency of loan recovery policies.

Particulars	NRB	2064/065	2065/066	2066/067	2067	/068	2068/069
	Std.						
LLP to	1	1.80	1.48	1.23	1.0	00	1.00
Pass Loan							
LLP to	25	-	-	-	-		-
Sub-							
standard							
Loan							
LLP to	50	-	-	-	-		-
Doubtful							
Loan							
LLP to	100	100	100	100	10	0	100
Bad Loan							
Total LLP		1.92	1.69	1.40	1.5	52	1.63
to Total							
Loan							
Average LL	Average LLP to Total Loan Ratio $(\bar{X})^{\#}$ 1.63						
Standard Deviation of LLP to Total Loan Ratio $(\sigma)^{\#}$ 0.17							0.17
Coefficient	Coefficient of Variation of LLP to Total Loan Ratio 10.71%						
(C.V.) <sup>#</sup>							

 Table 4.5: Loan Loss Provision Ratio (%)

Source: FFL, Annual reports.

<sup>#</sup> Worked out from Appendix 5

Table 4.5 shows the loan loss provision ratio of FFL. The provision maintained by the company for pass loans is above 1.00% NRB standard in all the fiscal years. The loan loss provision ratio for pass loan is in decreasing trend but sufficient as per NRB standard. There is no loan loss provision for sub-standard and doubtful loan because no loans are falls under these categories. Loan loss provision for bad loan has maintained as 100% in all the fiscal years in this study period, which is exact standard of NRB. It indicates the company has maintained sufficient provision for loan

loss. The ratio of total LLP to total loan ranges from 1.40% to 1.92% with an average of 1.63% in the study period. The C.V. between them is 10.71%, which implies that the ratios are consistent with the decreasing trend.



Fig. 4.4: Trend of Loan Loss Provision Ratio

Fig.4.4 shows the observed value of loan loss provision ratio along with trend (linear) line obtained by least square method. The negative slope of the trend line indicates the trend of loan loss provision ratio is decreasing over the study period.

#### 4.1.3 Management Efficiency

Management aspect of the bank and FIs is most important among the CAMELS components. Management quality is the overall capability of the management reflecting good corporate governance, comprehensive process to identify, measure and minimize risk and transformation of human resource into effective and productive service delivery. All these ensure safety and soundness of the company.

It is difficult to measure the management quality. However, if bank/FI is poor in capital adequacy, income-expense portfolio and earnings, then it indicates management's weakness and inability to control the deteriorating financial position of bank/FI. On the contrary, strong performance indicates good management quality. Among various measures, expenses ratio and earning per employee are used as proxy of the management quality.

# 4.1.3.1 Total Expense to Total Income Ratio

Expenses used for productive purpose, creation and generation of economic values, enhancement of managerial and performance skills etc. should be encouraged. Otherwise, unnecessary expenses must be strictly controlled. On the other hand, management efficiency can be evaluated on the basis of quantity and quality of revenues. Expenses of bank and FIs comprises of interest expense, other operating expense, foreign exchange loss, provision for possible losses, non operating expense, provision for staff bonus and provision for tax, whereas income include interest income, commission and discount, other operating income, foreign exchange gain, non-operating income and write back of provision for possible loss. The ratio of total expense to total income gives the percentage of total expense in total income.

Rs. in Million

FY (Ashad-End)	2064/065	2065/066	2066/067	2067/068	2068/069
Total Expenses	75.55	106.33	192.23	286.04	334.10
(Rs.)					
Total Income	102.31	135.33	249.38	351.79	389.77
(Rs.)					
TETIR (%)	77.30	78.57	77.08	81.31	85.72

Average TETIR $(\bar{X})^{\#}$	79.65
Standard Deviation of TETIR ( $\sigma$ ) <sup>#</sup>	3.58
Coefficient of Variation of TETIR (C.V.) <sup>#</sup>	4.50%
Sources FEL Annual Perperta	· · · · ·

Source: FFL, Annual Reports.

<sup>#</sup> Worked out from Appendix 5

Table 4.6 shows the ratio of total expense to total income of FFL. During the study period, the ratio is in increasing trend except FY 2066/067. The ratio is maximum with 85.72% in FY 2068/069 and minimum with 64.28% in FY 2064/065. The mean ratio for the study period is 77.39% and C.V, is 4.50%, which indicates the consistent characteristics of the ratios.

Fig 4.5: Trend of Total Expense to Total Income Ratio



In fig. 4.5, the observed value of total expense to total income ratio and its trend line are shown. The trend line of the least square method is positive which shows the increasing trend of ratio and not good for the company.

# 4.1.3.2 Earning Per Employee

Contribution of an employee on earning is measured by earning per employee. It is obtained by dividing net profit after tax by the number of employees. Low or decreasing earning per employee indicates inefficiencies as a result of overstaffing, which negatively affect the profitability of the bank.

FY (Ashad-End)	2064/065	2065/066	2066/067	2067/068	2068/069	
NPAT (Rs.)	25.02	29.01	57.15	65.75	55.68	
No. of	19.00	43.00	60.00	72.00	92.00	
Employees						
EPE (Rs.)	1.32	0.67	0.95	0.91	0.61	
Average EPE (	$\overline{X})^{\#}$				0.89	
Standard Devia		0.25				
Coefficient of V	Coefficient of Variation of EPE (C.V.) <sup>#</sup>					

#### Table 4.7: Earning Per Employee

Rs. in Million

Source: FFL, Annual Reports.

<sup>#</sup> Worked out from Appendix 5

While reviewing the data given in table 4.7, it is found that earning per employee of the company is fluctuating in range from Rs.1.32 million in FY 2064/065 to Rs.0.61 million in FY 2068/069. The above data shows the maximum decrement in FY 2065/066, due to high increment of employees, then EPE has increased to Rs.0.95 million and then in decreasing trend. The mean earning per employee of the review period is 0.89 million, which is satisfactory but the management has to concentrate in improving efficiency of employees.



Fig. 4.6: Trend of Earning Per Employee

Fig 4.6 exhibits the value of earning per employee and its trend line. The slope of trend line determined by least square method is negative, which indicates the decreasing trend of earning per employee.

### 4.1.4 Earning Performance

Good earning i.e. profitability ensures smooth operation and high competitiveness of the FI by providing sufficient resources and financial support to maintain adequate internal capital. Low earning or unable to earn required level of profit indicates low performance and such FI has weak operation and inadequate capital provisions. Therefore, earning capability can be taken as the key to strong performance, sustainable growth and sound financial health of the FI and the FI is required to focus its efforts on achieving high earning.

# 4.1.4.1 Return on Equity (ROE)

Shareholder expects higher return from their investment, but the return depend on how efficiently and safely the investment has been performed. ROE measures the rate of return on equity capital of shareholders. Higher ratio implies higher satisfaction to shareholders and better performance of the company and vice versa. The return on equity should be 15 percent and higher as prescribed by the World Bank (McNally, 1996).

Table	4.8:	Return	on	Equity
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Rs. in Million

FY	2064/065	2065/066	2066/067	2067	////68	2068/060	
(Ashad-End)	2004/003	2003/000	2000/007	2007/000		2000/009	
NPAT (Rs.)	25.02	29.01	57.15	65.75		55.68	
Shareholders'	104.16	172.26	332.70	353.91		377.98	
Equity (Rs.)							
ROE (%)	24.02	16.84	17.18	18.58	3	14.73	
Average ROE	$(\overline{X})^{\#}$		·			18.27	
Standard Deviation of ROE $(\sigma)^{\#}$						3.13	
Coefficient of Variation of ROE(C.V.)#						17.12%	

Source: FFL, Annual Reports.

<sup>#</sup> Worked out from Appendix 5

Table 4.8 shows the return on equity ratio over the study period. ROE has been fluctuating over the period. In FY 2064/065, the ratio is 24.02% and it is decreased to 16.84% in FY 2065/066, then it is increased to 17.18% and 18.58% in FY 2066/067 and FY2067/068 respectively. And at the concluding year FY2068/069 it is decreased to 14.73%. The average ROE of the company during the review period is 18.27%, which is above than the 15.00% of benchmark and C.V. of 17.12% reflects the ROE of the company is inconsistent.



Fig. 4.7: Trend of Return on Equity

In fig.4.7, the observed ratio of the ROE and its trend line are shown. ROE of the company is fluctuating over the review period. The slope of the trend line determined by least square method is negative and shows the decreasing trend of the ratio.

#### 4.1.4.2 Return on Assets (ROA)

This ratio seeks to measure the effectiveness with which the company has employed its total assets. It is also applicable in measuring the performance of individual divisions of a bank (Western and Copeland, 1992). ROA measures the rate of return from the assets. It evaluates how efficiently the available resources i.e. assets are utilized to generate profit. When the management shows capability to circulate its assets up to maximum limit and minimize risk during circulation of assets, then maximum return can be obtained. Higher ROA indicates efficient utilization of assets and vice versa. The return on assets should be 1.5 percent and higher as prescribed by the World Bank (McNally, 1996).

 Table 4.9: Return on Assets

Rs.	in	Million

FY (Ashad-End)	2064/065	2065/066	2066/067	2067	7/068	2068/069	
NPAT (Rs.)	25.02	29.01	57.15	6	5.75	55.68	
Total Assets (Rs.)	997.09	1,401.72	2,124.11	2,46	53.03	2,892.94	
ROA (%)	2.51	2.07	2.69	2.67		1.92	
Average ROA $(\bar{X})^{\#}$						2.37	
Standard Deviation of ROA $(\sigma)^{\#}$						0.32	
Coefficient of Variation of ROA (C.V.) <sup>#</sup>						13.33%	

Source: FFL, Annual Reports.

<sup>#</sup> Worked out from Appendix 5

During the review period, the return on assets ratio of the company is fluctuating in the range of 1.92% to 2.69%. ROE of the company is 2.51% in FY 2064/065, which is decreased to 2.07% in FY 2065/066 and increased to 2.69% in FY 2066/067, then decreasing to 2.67% and 1.92% in FY 2067/068 and FY 2068/069 respectively. The average return on assets ratio of the company is 2.37% with C.V. of 13.33% in the review period.

Fig. 4.8: Trend of Return on Assets



In fig.4.8, the observed value of return on assets ratio and its trend line are shown. The slope of trend line determined by the least square method is negative and shows the decreasing trend of the ratio.

## 4.1.4.3 Net Interest Margin (NIM)

NIM measures the earning capability of FI in terms of interest rate spread. This ratio shows the relationship between the difference of interest income and interest expense to earning assets. It evaluates the effectiveness of earning assets mobilization so as to earn more interest and on the other hand, management of liabilities portfolio bearing less interest costs and risk. Higher and consistent NIM implies strong earning capability of the bank and vice versa. The NIM ratio should be 3 to 4 percent and higher as prescribed by the World Bank (McNally 1996).

Ta	ble	4.10:	Net	Interest	Margin
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Rs. in Million

FY (Ashad-End)	2064/065	2065/066	2066/067	2067/068		2068/069
NII (Rs.)	41.19	49.23	100.40	12	8.89	120.62
Earning		1,107.95	1,647.17	1,86	6.84	2,115.09
Assets (Rs.)	841.15					
NIM (%)	4.90	4.44	6.10	6	.90	5.70
Average NIM $(\bar{X})^{\#}$						5.61
Standard Deviation of NIM $(\sigma)^{\#}$						0.87
Coefficient of	Variation of	NIM (C.V.	)#		]	15.52%

Source: FFL, Annual Reports.

<sup>#</sup>Worked out from Appendix 5

While reviewing the ratio of net interest margin given in table 4.10, the ratios are found in fluctuating trend with maximum 6.90% in FY2067/068 and minimum 4.44% in FY 2065/066. During the study period, the mean

ratio is 5.61% and C.V. is 15.52%. In all the fiscal years, NIM is above the benchmark of 3% to 4%.



Fig. 4.9: Trend of Net Interest Margin

In fig 4.9, it can be observed that the ratio of net interest margin is in fluctuating trend, in which the ratio shows downward movement in the second fiscal year and then upward movement in the third and fourth fiscal years and again downward movement in the concluding fiscal year. As the slope of trend line obtained by least square method is positive, it indicates the increasing trend of NIM.

### 4.1.4.4 Earning Per Share (EPS)

EPS measures how much return can be earned from each share by the common stockholders (Ordinary Shareholders). Higher EPS indicates better performance and strong market position of the company whereas lower EPS indicates worse performance and weak market position of the company. EPS of the company measures the profit available to the equity shareholders on per share basis. It reflects the earning power of a company.

FY	2061/065	2065/066	2065/066 2066/067		7/068	2068/060	
(Ashad-End)	2004/005	2005/000	2000/007	2007/008		2000/009	
NPAT (Rs.)	25022965	29007517	57153481	6574	19848	55675536	
No. of Share	o. of Share 700000 910000 2730000 273					3003000	
EPS (Rs.)	35.74	31.88	20.93		24.08	18.54	
Average EPS (A			26.23				
Standard Deviation of EPS $(\sigma)^{\#}$						6.55	
Coefficient of Variation of EPS (C.V.) <sup>#</sup>						24.95%	

 Table 4.11: Earning per Share

Source: FFL, Annual Reports.

<sup>#</sup> Worked out from Appendix 5

Table 4.11 exhibits the earning per share of the company. EPS of the company is in the range of maximum Rs.35.74 in FY 2064.065 and minimum Rs.18.54 in FY 2068/069. EPS of the company is continuously decreasing in the review period except FY 2067/068. The average EPS of the company in the study period is Rs.26.23 and C.V. is 24.95%, which shows the inconsistent EPS of the company.

Fig. 4.10: Trend of Earning Per Share



In fig 4.10, the observed value of earning per share and its trend line are shown. The slope of the trend line determined by least square method is negative, which reveals the decreasing trend of earning per share.

#### 4.1.5 Liquidity Position

Liquidity is the FI's ability to maintain cash which is adequate to fulfill cash demand for loan and deposit withdrawal. Keeping cash idle or maintaining high liquidity position has adverse effect on profitability of the FI. On the other hand, low liquidity position cannot support the FI to meet expected and unexpected financial demand, which results in higher liquidity cost, lowering trust of depositors and creditors and negative impact on goodwill of the company. Against the benefits associated with maintaining liquidity, one must balance the cost. Liquid assets, like all other assets, have to be financed. Accordingly, the cost of liquidity may be thought of as the differential in interest earned on the investment of funds in liquid assets and the cost of financing. If the bank could both borrow and lend at the same interest rate, there would be no "cost" to maintain whatever level of liquidity was desired to reduce the profitability of technical insolvency. If imperfections in the capital markets result in the borrowing rate exceeding the lending rate, there is a "cost" to maintain liquidity. Under these conditions, a trade-off exits between the benefits associated with liquidity and the cost of maintaining it (Van Horne, 2006).

### 4.1.5.1 Liquid Assets to Total Deposit Ratio

This ratio evaluates whether the FI is in a position to fulfill cash demand of its depositors and creditors or not. In short, it measures the overall short-term liquidity position of the FI. It shows the percentage of liquid assets in total deposit. The higher ratio implies the better liquidity position and lower ratio shows weak liquidity position of the company. Liquidity assets include cash in hand, b/l with NRB, b/l with domestic bank/FIs, b/l with

foreign banks, money at call or short notice and investment in government securities. As per the NRB directives, those finance companies are required to maintain liquidity position of at least 6%, which does not accept current and call deposit.

	Rs.	in	Mi	llion
--	-----	----	----	-------

FY (Ashad-End)	2064/065	2065/066	2066/067	2067/068	2068/069
Liquid Assets	144.94	288.14	453.22	587.70	721.39
(Rs.)					
Total Deposit(Rs.)	842.42	1,204.46	1,689.29	2,009.91	2,433.09
Liquid Assets to	17.21	23.92	26.83	29.24	29.65
Total Deposit (%)					
*IAR (%)	33.93	28.75	28.06	24.00	35.32
Diff From IAR	(16.72)	(4.83)	(1.23)	5.24	(5.67)
(%)					

Source: FFL, Annual Reports.

\* Worked out from Appendix 6.

While reviewing the ratio of liquid assets to total deposit in table 4.12, it is found that the ratio has been increased continuously in the study period. The ratio is minimum in FY 064/05 with 17.21% and maximum in FY 068/069 with 29.65%. Similarly, While comparing the liquid assets to total deposit ratio with industrial average ratio, it is short by 16.72% in FY064/065, 4.83% in FY065/066, 1.23% in FY066/067 & 5.67% in FY068/069. It is above the IAR by 5.24% in FY067/068. The company has maintained liquidity above the NRB Standard in all the fiscal years.



Fig. 4.11: Comparing Liquid Assets to Total Deposit Ratio with Industrial Average

Fig 4.11 exhibits the comparison of liquid assets to total deposit ratio with industrial average ratio. From the figure, it can be observed that the ratio curve of liquid assets to total deposit ratio is below the industrial average in all the fiscal years except FY067/068.

#### 4.1.5.2 NRB Balance to Total Assets Ratio

Bank and FIs are required to keep certain percentage of their total deposit in NRB in order to maintain adequate liquidity and control credit expansion capacity of the bank and FIs. Thus, this ratio judges whether the FI has maintain balance as prescribed by NRB or not. Finance companies are required to maintain 5% of their deposits as CRR in NRB. But those finance companies, which collect deposits except current and call deposit required 2% of their deposit as CRR in NRB.

FY 2064/065 2065/066 2066/067 2067/068 2068/069 (Ashad-End) NRB Balance 17.52 30.86 35.52 55.49 86.2 (**Rs**.) Total 2,009.91 842.42 1,204.46 1,689.29 2,433.09 Deposit(Rs.) NRB Balance 2.76 3.54 2.08 2.56 2.10 to Total Deposit (%) \*IAR (%) 7.37 3.97 3.28 5.14 2.82 Diff From (5.29)(1.41)(1.18)(0.06)(1.60)IAR (%)

 Table 4.13: NRB Balance to Total Deposit Ratio

Rs. in Million

Source: FFL, Annual Reports.

\* Worked out from Appendix 6.

Table 4.13 shows the ratio of NRB balance to total deposit, which falls under cash reserve ratio (CRR) requirement as prescribed by NRB. From the tabulated data, it is found that the ratio is minimum in FY2064/065 with 2.08% and maximum in FY2068/069 with 3.54%. The ratios are in increasing trend in all the fiscal years of the study period except FY2066/067. Regarding comparison with industrial average, the company has NRB balance to total deposit ratio are below in all the fiscal years of the study period. The company has maintained CRR above the 2% NRB standard in all the fiscal years as the company does not accept current and call deposits.



Fig. 4.12: Comparing NRB Balance to Total Deposit Ratio with Industrial Average

Fig 4.12 shows the comparison of NRB balance to total deposit ratio with industrial average. From the figure, it can be observed that the ratio curve is below than the industrial average in all the fiscal years of the study period.

### 4.1.5.3 Cash in Vault to Total Deposit Ratio

This ratio measures the proportion of cash in vault to total deposit. Cash in vault include cash in hand and foreign currency in hand. This ratio measures the position of the company to fulfill cash demand of its depositors and creditors. Lower ratio implies weak position and higher ratio implies strong position to meet short term cash obligations.

### Table 4.14: Cash in Vault to Total Deposit Ratio

Rs.	in	Mil	lion

FY (Ashad-End)		2064/065	2065/066	2066/067	2067/068	2068/069	
Cash	in	Vault	24.36	12.49	19.27	51.37	67.59
(Rs.)							
Total			842.42	1,204.46	1,689.29	2,009.91	2,433.09

Deposit(Rs.)					
Cash in vault to	2.89	1.04	1.14	2.56	2.78
Total Deposit (%)					
*IAR (%)	1.13	1.06	1.23	1.43	1.77
Diff. From IAR	1.76	(0.02)	(0.09)	1.13	1.01
(%)					

Source: FFL, Annual Reports.

\* Worked out from Appendix 6.

The data given in table 4.14 shows the cash in vault to total deposit ratio. During the review period, the ratio decreases in the second year to 1.04%, which is the minimum ratio and thereafter, it continuously increases. The ratio is maximum in FY2064/065 with 2.89%.The ratio is above the industrial average except FY2065/066 & FY 2066/067.

Fig.4.13: Comparing Cash in Vault to Total Deposit Ratio with Industrial Average



Fig. 4.13 exhibits the comparison of cash in vault to total deposit ratio with industrial average. From the figure, it can be observed that the ratio curve is above the industrial average in FY2064/065, FY2067/068 & 2068/069 and below the industrial average in FY2065/066 & FY2066/067 with little difference. It indicates the company has maintained almost adequate level of cash in vault to fulfill immediate cash demand of its clients.

#### 4.1.6 Sensitivity to Market Risk

Sensitivity to market risk measures to what extent the change in the market risk components can affect the earning performance of FIs. Market risk components include interest rates. Foreign exchange rates, commodity prices and equity prices and they have varying degree of relation with the assets and liabilities of the company. As interest rate risk (IRR) is common to many FIs, this section targets to expose IRR on earning of the company. For further analysis of interest rate sensitivity, it is assumed that the interest falls or rises by 1% in the market.

#### Table 4.15: GAP Analysis

#### FY 2064/065

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	185.90	70.00	80.00	95.00	544.50	975.40
RSL (Rs.)	120.00	99.50	102.00	104.50	416.40	842.40
GAP <sub>i</sub> [RSA-RSL] (Rs.)	65.90	(29.50)	(22.00)	(9.50)	128.10	133.00
CGAP <sub>i</sub> [RSA-RSL]	65.90	36.40	14.40	4.90	133.00	
(Rs.)						
GAP Ratio (RSA/RSL)	1.55	0.70	0.78	0.91	1.31	1.16
CGAP Ratio	6.76	3.73	1.48	0.50	13.64	
[CGAP/Total						
RSAs](%)						
$\Delta R (\%)$				1.00	1.00	

Rs. in Million

$\Delta$ NII [CGAP× $\Delta$ R]		0.05	1.33	
(Rs.)				
% Change in NII		0.01	0.14	
[CGAP Ratio $\times \Delta R$ ] (%)				

# FY 2065/066

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	321.70	85.00	90.00	95.00	773.90	1,365.60
RSL (Rs.)	240.00	111.00	111.00	116.00	626.50	1,204.50
GAP <sub>i</sub> [RSA-RSL] (Rs.)	81.70	(26.00)	(21.00)	(21.00)	147.40	161.10
CGAP <sub>i</sub> [RSA-RSL]	81.70	55.70	34.70	13.70	161.10	
(Rs.)						
GAP Ratio (RSA/RSL)	1.34	0.77	0.81	0.82	1.24	1.13
CGAP Ratio	5.98	4.08	2.54	1.00	11.80	
[CGAP/Total						
RSAs](%)						
Δ R (%)				1.00	1.00	
$\Delta$ NII [CGAP× $\Delta$ R]				0.14	1.61	
(Rs.)						
% Change in NII				0.01	0.12	
[CGAP Ratio $\times \Delta R$ ] (%)						

# FY 2066/067

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	573.20	179.00	184.50	215.00	907.90	2,059.60
RSL (Rs.)	360.00	270.00	270.00	220.00	569.20	1,689.20
GAP <sub>i</sub> [RSA-RSL] (Rs.)	213.20	(91.00)	(85.50)	(5.00)	338.70	370.40
CGAP <sub>i</sub> [RSA-RSL]	213.20	122.20	36.70	31.70	370.40	
(Rs.)						
GAP Ratio (RSA/RSL)	1.59	0.66	0.68	0.98	1.60	1.22
CGAP Ratio	10.35	5.93	1.78	1.54	17.98	

[CGAP/Total				
RSAs](%)				
$\Delta R (\%)$		1.00	1.00	
$\Delta$ NII [CGAP× $\Delta$ R]		0.32	3.70	
(Rs.)				
% Change in NII		0.02	0.18	
[CGAP Ratio $\times \Delta R$ ] (%)				

## FY 2067/068

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	662.30	187.50	261.90	125.90	1,093.70	2,331.30
RSL (Rs.)	347.70	332.10	519.20	296.60	514.30	2,009.90
GAP <sub>i</sub> [RSA-RSL]	314.60	(144.60)	(257.30)	(170.70)	579.40	321.40
(Rs.)						
CGAP <sub>i</sub> [RSA-RSL]	314.60	170.00	(87.30)	(258.00)	321.40	
(Rs.)						
GAP Ratio	1.90	0.56	0.50	0.42	2.13	1.16
(RSA/RSL)						
CGAP Ratio	13.49	7.29	(3.74)	(11.07)	13.79	
[CGAP/Total						
RSAs](%)						
Δ R (%)				1.00	1.00	
$\Delta$ NII [CGAP× $\Delta$ R]				(2.58)	3.21	
(Rs.)						
% Change in NII				(0.11)	0.14	
[CGAP Ratio $\times \Delta R$ ] (%)						

## FY 2068/069

Rs. in Million

Maturity Time (Day)	1-90	91-180	181-270	271-365	>365	Total
RSA (Rs.)	684.10	192.90	298.00	172.70	1,364.20	2,711.90
RSL (Rs.)	319.40	320.70	336.40	310.90	1,145.70	2,433.10

GAP <sub>i</sub> [RSA-RSL]	364.70	(127.80)	(38.40)	(138.20)	218.50	278.80
(Rs.)						
CGAP <sub>i</sub> [RSA-RSL]	364.70	236.90	198.50	60.30	278.80	
(Rs.)						
GAP Ratio	2.14	0.60	0.89	0.56	1.19	1.11
(RSA/RSL)						
CGAP Ratio	13.45	8.74	7.32	2.22	10.28	
[CGAP/Total						
RSAs](%)						
Δ R (%)				1.00	1.00	
$\Delta$ NII [CGAP× $\Delta$ R]				0.60	2.79	
(Rs.)						
% Change in NII				0.02	0.10	
[CGAP Ratio $\times \Delta R$ ] (%)						

Note:  $\Delta R$  = Change in interest rate

 $\Delta$ NII = Change in net interest income

In table 4.15, it is assumed that interest rate changes by 1%. In the short term maturity bucket ranging from 0-90 days to 271-365 days, periodic net financial assets (RSA-RSL) is negative in time bucket of 91-180, 181-270 & 271-365 and which is positive in time bucket of 1-90 & >365 in almost all the years. But cumulative net financial assets is almost positive in all the years except in FY 2067/068, in which CGAP is negative by 87.30 million and 258.00 million in time bucket of 181-270 and 271-365 days.


Fig. 4.14: Level of Risk Sensitive Assets, Liabilities and CGAP Ratio over time

Fig. 4.14 shows the level of RSAs, RSLs and CGAP ratio of the company under different sequential time intervals (0-90, 91-180, 181-270, 271-365, >365 days). The level RSLs are higher than that of RSAs in the time buckets of 91-180, 181-271 & 271-365 days in almost all the FIs, due to which periodic GAP is negative and GAP ratio is less than 1. In such case, if interest rates rise on both RSAs and RSLs by equal percentage, then the company pays more than what it earns because of more liabilities are repriced. On the contrary, when interest fall, then interest expense decreases more than interest income. On the other hand, the level of RSAs is higher with comparison of RSLs in the time bucket of 1-90 & >365 days in almost all the FYs, which causes periodic GAP is positive and GAP ratio is more than 1. In such case, if interest rate rise on both RSAs and RSLs by equal percentage, then the company pays less the what it earns because of more assets are re-priced. In contrast, when interest fall, then interest income decreases more than interest expenses. Cumulative GAP is positive in all the fiscal years except FY2067/068 in time bucket of 181-270 and 271-365 days, due to which CGAP ratio in such bucket is negative. Beside this, CGAP ratios are positive in all the FYs, in such case, in a rising interest environment, company earns more than what it pays because more assets are re-priced and vice versa.

### **4.2Major Findings**

The major findings of the study obtained from the analysis of data regarding financial performance of FFL in the CAMELS framework are as follows:

- 4.2.1 During the five fiscal years of the study period, the ratio of core capital adequacy relative to RWA of FFL is 11.93% in FY 2064/065, 14.73% in FY 2065/066, 14.60% in FY 2066/067, 18.09% in FY 2067/068 and 16.47% in FY 2068/069. The core capital ratio of the company is above NRB in all the fiscal years of study period.
- **4.2.2** The supplementary capital adequacy ratio of the company is 1.25%, 1.25%, 1.18%, 0.94% & 0.93% in FY 2064/065 to FY 2068/069 respectively. In all the fiscal years of study period, the ratio is within the limit of NRB standard. SCAR is decreasing slightly in subsequent fiscal years.
- **4.2.3** The capital adequacy ratio is 13.18% in FY 2064/065, 15.98% in FY 2065/066, 15.78% in FY 2066/067, 19.03% in FY 2067/068 and 17.40% in FY 2068/069. Capital adequacy ratio of the company is above NRB standard in all the fiscal years of study period.
- 4.2.4 The percentage of performing loans of the company varies from minimum 99.36% in FY 2068/069 to maximum 99.88% in FY 2064/065, which are above the IAR in all the fiscal years. The NPL is 0.12% in FY 2064/065, 0.22% in FY 2065/066, 0.17% in FY 2066/067, 0.52% in FY 2067/068 and 0.64% in FY 2068/069. In all

the fiscal years of study period, NPL ratio of the company is below IAR, however percentage of NPL is almost increasing in consequent fiscal years.

- **4.2.5** The company has booked adequate level of LLP as prescribed by NRB in all the fiscal years. LLP to pass loan is in decreasing trend however it is sufficient as per NRB standard. The company has booked 100% provision for loan loss to bad loan in all the fiscal years. Total LLP to total loan is in the range of 1.92% to 1.40%.
- **4.2.6** Total expense to total income ratio (TETIR) of the company is minimum 64.28% in FY 2064/065 and maximum 85.72% in FY 2068/069. TETIR of the company is almost increasing in subsequent fiscal years except FY 2066/067 with 77.08%, which is slightly decreased in comparison of previous fiscal year.
- **4.2.7** The earning per employee is Rs.1.32 million, Rs.0.67 million, Rs.0.95 million, Rs.0.91 million and Rs.0.61 million in FY 2064/065 to FY 2068/069 respectively. Earning per employee of the company is fluctuating over the study period and is in decreasing trend as determined by least square method. Maximum EPE of the company with Rs. 1.32 million is in initial FY 2064/065 and minimum EPE of the company with Rs.0.61 million in concluding FY 2068/069.
- **4.2.8** The ROE of the company is maximum with 24.02% in FY2064/065 and minimum with 14.73% in concluding FY 2068/069. ROE of the company has been highly declined in FY 2065/066 and which has been increasing gradually till FY 2067/068 and decreased in concluding FY 2068/069, which are fluctuating over the period.
- **4.2.9** Over the study period, the ROA of the company lies in between 1.92% in FY 2068/069 and 2.69% in FY 2066/067. The ROA is fluctuating but they are above 1.5% benchmark in all the fiscal years.

- **4.2.10** The company has maintained net interest margin maximum with 6.90% in FY 2067/068 and minimum with 4.44% in FY 2065/066 with average margin of 5.81%. The company has efficiently mobilized the earning assets with higher interest income and liabilities with less interest costs. Overall, NIM of the company is at satisfactory level.
- **4.2.11**Earning per shares of the company is Rs.35.74, Rs.31.88, Rs.20.93, Rs.24.08, Rs.18.54 in FY 2064/065 to FY 2068/069 respectively, which is gradually decreasing in subsequent fiscal years except FY 2067/068.
- **4.2.12**The liquid assets to total deposit ratio is minimum with 17.21% in FY 2064/065 to maximum with 29.65% in concluding FY 2068/069. The ratio below IAR in all fiscal years of the study period except FY2067/068 and which is increasing in every subsequent fiscal years and shows that the liquidity level of the company is strong. The company has maintained liquidity above the NRB standard in all the fiscal years.
- **4.2.13**The ratio of NRB balance to deposit of the company over the study period is 2.08%, 2.56%, 2.10%, 2.76% & 3.54% in FY 2064/065 to FY 2068/069 respectively. The ratio is below IAR in all the fiscal years, however, the company has maintained the ratio above the 2% NRB standard in all the fiscal years.
- **4.2.14**The cash in vault to total deposit ratio is minimum with 1.04% in FY 2065/066 and maximum with 2.89% in FY 2064/065. The company has maintained cash in vault to total deposit ratio above IAR in all the fiscal years except FY 2065/066 and FY 2066/067.
- **4.2.15**The company has negative periodic GAP (RSAs-RSLs) in maturity bucket of 91-180, 181-270 & 271-365 and positive periodic GAP in maturity bucket of 1-90 & >365 of all the fiscal years of review

period. But CGAP is positive in almost all the maturity bucket over study period except maturity bucket of 181-270 & 271-365 of FY 2066/067. On an average, it is found that the sensitivity level of RSAs and RSLs to interest change risk is nominal in short term maturity bucket and which is bit higher in long term maturity bucket.

### **CHAPTER V**

### SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter is divided into three parts: summary, conclusion and recommendations. The whole study is briefly summarized in the first part. Then, the conclusions drawn out are included in the next part. Lastly, the final part presents the recommendations.

#### 5.1 Summary

With the view of ratings the banks and FIs in terms of efficient management of various risks emerged as a result of globalization and high competition, this study attempts to evaluate the financial performance of Fewa Finance Limited (FFL) in the framework of CAMELS. Based on the publicly available financial data, the rating procedure has focused on the six components – capital adequacy, assets quality, management efficiency, earning position, liquidity level and sensitivity to market risks, so that the specific problematic areas within the bank are identified and overall financial performance is judged.

As FFL is taken as sample out of the 69 finance company till Ashad End 2069, this represents case study approach and convenience sampling method is used. This research design followed is descriptive cum analytical research design. The study covered five fiscal years' data published in the FFL's annual reports from FY 2064/065 to FY 2068/069 forming the major source of data. Beside this, directives related to NRB and other secondary information is obtained by the field visit.

The Basel Committee on Banking Supervision (BCBS) of the Bank for International Settlements (BIS) has recommended using CAMELS framework as criteria for assessing bank and FI's financial performance The BCBS replaced the Basel-I capital accord, which was issued in 1988, by new capital accord (Basel-II) in June, 1999 with an objective to make the capital framework more risk sensitive.

CAMELS is a common method for appraising the performance of the banks and FIs used by the worldwide supervisory authorities. To understand and include the relevant views of different scholars, authors, researchers etc., various books, journals, dissertations etc. were reviewed.

The application of pertinent financial tools and the comparison of the results with NRB standard and IAR shows that the company has maintained sufficient capital adequacy ratios as prescribed by NRB. The company has nominal NPL, which are less than IAR over the study period. LLP ratio of the company has decreased in initial 2 years and slightly increasing in later years. Overall the company has allotted the provision as per specified norms of NRB. Total expenses to total income ratio is almost increasing and earning per employee is almost decreasing over the study period reflects the management's weakness. ROE and ROA of the company are above the benchmark of 15% and 1.5% respectively, which is satisfactory but they are in decreasing trend. NIM of the company is above the benchmark with positive slope of trend line and EPS is in decreasing trend due to newly issued shares. The liquidity ratios are almost below IAR except FY 2067/068 but the company has maintained adequate level of cash as CRR is above NRB standard in all the fiscal years. Cash in vault ratio is above IAR in all the fiscal years except FY2065/066 and FY 2066/067 with slight difference. Periodic GAP of maturity bucket of 91-180, 181-270 & 271-365 are negative and maturity bucket of 1-90 & >365 are positive in all the fiscal years. CGAP are almost positive in all the fiscal years except maturity bucket of 181-270 & 270-365 of FY 2067/068. The ratio of CGAP is fluctuating over the period. Positive CGAP ratio in almost all the fiscal years indicates that company is asset sensitive.

#### **5.2 Conclusions**

With respect to the findings, the research study has been reached at the following conclusions.

- **5.2.1** As the core capital adequacy ratio maintained by FFL is adequate in all the fiscal years over the study period, it can be concluded that the company is running with strong capital base to cover the risk of losses and complexities in the operations. However the ratio is fluctuating all over the period.
- **5.2.2** The adequacy of supplementary capital is not exceeding the core capital adequacy the ratio as per NRB standard. It can be concluded that the contribution of supplementary capital in the total capital is satisfactory. The supplementary capital ratio of the company is in decreasing trend over the period.
- **5.2.3** The capital adequacy ratio of the company is above NRB requirement in all the fiscal years in review period. The company is well capitalized, which gains the confidence of stakeholders towards the sound operation of company. Though the capital adequacy ratio is fluctuating, it can be said that the company has operating in strong capital base during the study period.
- **5.2.4** The company has properly maintained the quality of assets in the review period. NPL of the company is nominal however which is in increasing trend in consecutive fiscal years due to increasing portion of bad loan, which trend may be harmful towards the performance of the company if future. Though the need of some improvement in credit administration practices and recovery efforts, overall, there is satisfactory level of quality of assets over the study period.
- **5.2.5** The company has booked adequate loan loss provision ratio to cover possible losses in future. LLP is decreased continuously in initial fiscal years but which is slightly increasing in 2 fiscal years later on.

The loan loss provision maintained by the company for minimizing the loan default risk is quite satisfactory and which is above the NRB standard in all the fiscal years.

- **5.2.6** Lack of productive expenses and stable control of management on expense and income have increased the total expense to total income ratio. The ratio is almost in increasing trend, which shows the weakness of the management. Overall, total expenses to total income ratio of the company over the study period is satisfactory to some extent but the management should focus on productive expense.
- **5.2.7** On an average, the contribution of employees on earning is poor. The management is lacking effective utilization of the workforce. Earning per employee of the company is fluctuating with decreasing trend over the period, which is not at satisfactory level. Overall, the performance efficiency of the employee is not adequate to maintain management soundness of the company.
- **5.2.8** Return on equity of the company is fluctuating over the period and which are in decreasing trend due to newly issued shares. Overall the ratio is satisfactory, but the company needs some more efforts for maintaining sound financial health and meeting shareholders' expectations.
- **5.2.9** The fluctuating trend of ROA cannot smoothly support in the financial operations of the company. The risks associated assets are inadequately identified and managed in limited investment opportunities, which caused inefficient utilization of the assets and as a result portion of non earning assets are increasing in later fiscal years.
- **5.2.10**Net interest margin of the company is in increasing trend over the period, which shows the company has properly measured and utilized the spread. The company has efficiently mobilized the

earning assets with higher interest income and liabilities with less interest costs and risks. Overall it can be concluded that the position of NIM is at satisfactory level.

- **5.2.11**Decreasing trend of earning per share has adversely affected the expectations of its shareholders and market position. To some extent, it is occurred due to newly issued shares.
- **5.2.12**The liquid assets to total deposit ratio of the company is in increasing in consecutive fiscal years and maintained sufficient liquidity position. It can be concluded that the company has maintained satisfactory level of liquid assets and has accessibility to source of liquid funds at acceptable terms.
- **5.2.13**The company has maintained CRR above the NRB standard and below IAR in all the fiscal years. Though the ratio is slightly fluctuating over the period, it can be said that the company is properly executing its fund management practices to maintain CRR.
- **5.2.14**The company has maintained sufficient level of cash balance. Cash in vault to total deposit ratio has highly decreased in second fiscal year, however it has been increasing continuously later on. It can be said that the liquidity level of the company is satisfactory. The performance of the company is strong and capable to minimize the current and prospective liquidity risk and maintained liquidity position.
- **5.2.15**As the CGAP ratio of the company is almost positive, the company is said to be asset sensitive. Which has been earning more in a rising interest environment. When interest rate rise, interest income increases more than interest expenses because of more assets are repriced. The company has more interest rate risk in long term than short term as the company higher CGAP percent in long term maturity bucket.

#### 5.3 **Recommendations**

Based on above conclusions, the following recommendations regarding financial performance of FFL have been provided.

- **5.3.1** There is still some more space to enhance its capital from internal sources, which will support its growth and provides protection against solvency. Hence, the company is recommended to enhance capital additionally and maintain stable capital adequacy ratio in order to achieve confidence of its stakeholders with respect to sound financial performance of the company.
- **5.3.2** The company should be careful about the adverse effect of higher loan loss provision on profitability and initiate the effective recovery policies. As the prevention is better than cure, the company should immediately follow effective credit administration practices, close supervision and proper monitoring. The company should provide loans only after conducting proper risk based credit analysis. Thus, the company is required further attention to increase the quality of assets taking consideration to its past successful performance.
- **5.3.3** Management should formulate appropriate strategy for effective control over expenses and divert them towards productive purposes. Similarly, management should give equal priority to the quantity and quality of revenue. In order to increase the performance and earning efficiency of the employees, management should commence employee development program and participative management system. Management should be aware while recruiting new staffs for the company. At the end, the company is required to maintain good corporate governance, which is ultimate factor for maintaining sound managerial performance of the company. In addition, management should install the latest technology for increasing cost effectiveness and efficiency of its employees.

- **5.3.4** As the overall earning performance of the company is satisfactory, but which are in decreasing trend. As a result, it does not meet the expectation of shareholders and create adverse affect on its market position, which is obviously not a good situation in favor of the company. So, the company should focus on efficient mobilization of investment for constantly earning required level of profit which can change its decreasing trend of earning. Net interest margin of the company is fluctuating with increasing trend. It means interest income of the company is satisfactory, so the company should control over the unnecessary and unproductive expenses to earn maximum profit. The company should be able to increase its EPS to maintain confidence of shareholders and strengthen the market position in the competitive environment. Finally, the company is recommended to earn maximum profit to provide adequate financial support and maintain sound financial performance of the company.
- **5.3.5** Liquid assets to total deposit ratio, NRB balance to total deposit ratio and Cash in vault to total deposit ratio indicates the satisfactory level of liquidity position of the company over the study period. This should be continued in the future and avoid liquidity deficit and high liquidity surplus as the liquidity deficit may heading the company towards serious liquidity problems and liquidity surplus affect adversely to the profitability of the company by reducing return on assets.
- **5.3.6** As the CGAP ratio of the company is positive in almost maturity bucket over the study period, which indicates the company is asset sensitive. Which situation is in favor of company only in increasing interest environment, but in case of decreasing interest environment, it will affect adversely. The company should make proper arrangement for minimizing risk that arises from the mismatch of interest rate profile of the assets and liabilities. Interest rate change is uncertain and unexpected change can significantly alter the NII.

Therefore, the company is required to pay attention in establishing Asset & Liability Management Committee (ALCO) and its effective functioning to formulate appropriate strategies for assessing and minimizing the interest rates change risk and managing mismatch to the rates change so as to attain optimum NII.

- **5.3.7** All the standard which are directed by the NRB time to time should be followed and implemented to build the financial soundness of the company.
- **5.3.8** The company should be aware about the status of NPA towards its performance and effort should be made to minimize it.

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www.nrb.org.np

www.fewafinance.com.np

www.google.com

S.	Name	Date of	Location of Head Office
<b>N.</b>		Operation	
1	Nepal Housing Development	1992/03/08	Bijulibazar, Kathmandu
	Finance Co.Ltd.		
2	Nepal Finance Ltd.	1993/01/06	Kamaladi, Kathmandu
3	NIDC Capital Markets Ltd.	1993/03/11	Kamalpokhari,
			Kathmandu
4	Narayani National Finance Ltd.	2009/11/01	Kalikasthan, Kathmandu
5	Nepal Share Markets and Finance	1993/10/19	Ramshahapath,
	Ltd.		Kathmandu
6	Peoples Finance Ltd.	1993/04/15	Mahabauddha,
			Kathmandu
7	Mercantile Finance Co. Ltd.	1994/11/10	Birgunj, Parsa
8	Kathmandu Finance Ltd.	1994/11/10	Dillibazar, Kathmandu
9	Himalaya Finance Ltd.	1993/11/11	Sundhara, Kathmandu
10	Union Finance Ltd.	12/12/1995	Kamaladi,Kathmandu
11	Gorkha Finance Ltd.	1995/03/12	Hattisar, Kathmandu
12	Paschhimanchal Finance Co.Ltd.	1995/04/09	Butawal, Rupandehi
13	Nepal Housing & Merchant	1995/04/11	Dillibazar, Kathmandu
	Finance Ltd.		
14	Goodwill Finance Ltd.	1995/05/16	Dillibazaar, Kathmandu
15	Siddhartha Finance Ltd.	1995/05/25	Siddarthanagar,
			Rupandehi
16	Shree Investment & Finance Co.	1995/06/01	Dillibazar, Kathmandu
	Ltd.		
17	Lumbini Finance & Leasing Co.	1995/06/26	Thamel, Kathmandu
	Ltd.		
18	Yeti Finance Ltd.	1995/07/23	Hetauda, Makawanpur
19	International Leasing & Finance	1995/10/31	Naya Baneshwor,
	Co. Ltd.		Kathmandu
20	Mahalaxmi Finance Ltd.	1995/11/26	Putalisadak, Kathmandu
21	Lalitpur Finance Co. Ltd.	1995/12/12	Lagankhel, Lalitpur
22	Bhajuratna Finance & Saving Co.	1996/01/09	Kantipath, Kathmandu
	Ltd.		
23	United Finance Co. Ltd.	1996/1/25	Durbarmarg, Kathmandu
24	General Finance Ltd.	1996/02/02	Chabahil, Kathmandu
25	Progressive Finance Ltd.	1996/01/02	Newroad, Kathmandu
26	Alpic Everest Finance Ltd.	1996/07/16	Kathmandu Mall,
			Kathmandu
27	Nava Durga Finance Co.Ltd.	1997/02/09	Itachhe, Bhaktapur
28	Janaki Finance Co. Ltd.	1997/03/07	Janakpurdham, Dhanusha
29	Pokhara Finance Ltd.	1997/03/16	Pokhara, Kaski
30	Central Finance Ltd.	1997/04/14	Kupondole, Lalitpur
31	Premier Finance Co. Ltd.	1997/05/08	Kumaripati, Lalitpur
32	Arun Finance Ltd.	1997/08/17	Dharan, Sunsari

# List of Finance Companies as on Ashad End 2069

33	Multipurpose Finance Co. Ltd	1998/3/25	Rajbiraj, Saptari
34	Butwal Finance Ltd.	1998/06/21	Butawal, Rupandehi
35	Shrijana Finance Ltd.	1999/12/14	Biratnagar, Morang
36	Om Finance Ltd.	2000/09/17	Pokhara, Kaski
37	CMB Finance Ltd.	2000/11/20	Kamalashhi, Kathmandu
38	World Merchant Banking &	2001/08/10	Hetauda, Makawanpur
	Finance Ltd.		-
39	Capital Merchant Banking &	2002/02/01	Battisputali, Kathmandu
	Finance Co. Ltd.		_
40	Crystal Finance Ltd.	2002/02/13	Thapathali, Kathmandu
41	Royal Merchant Banking &	2002/02/14	Durbarmarg, Kathmandu
	Finance Ltd.		
42	Guheshworil Merchant Banking &	2002/06/13	Pulchowk, Lalitpur
	Finance Ltd.		
43	Patan Finance Co. Ltd.	2002/06/23	Pulchowk, Lalitpur
44	Fewa Finance Ltd.	2003/04/30	Pokhara, Kaski
45	Everest Finance Ltd.	2003/07/02	Siddharthanagar,
			Rupandehi
46	Prudential Finance Company Ltd	2003/06/06	Dillibazar, Kathmandu
47	ICFC Finance Ltd.	2003/06/15	Bhatbhateni, Kathmandu
48	Sagarmatha Merchant Banking	2005/08/29	Maanvawan,Lalitpur
	and Finance Ltd		
49	Civil Merchant Bittiya Sanstha	2005/09/18	Kuleshwor,Kathmandu
	Ltd.		
50	Prabhu Finance Co. Ltd.	2006/02/16	Lainchur,Kathmandu
51	Imperial Finance Ltd.	2006/03/08	Thapathali,Kathmandu
52	Kuber Merchant Finance Ltd.	2006/03/24	Kamalpokhari,
			Kathmandu
53	Nepal Express Finance Ltd.	2006/05/04	Sundhara, Kathmandu
54	Valley Finance Ltd.	2006/05/11	Maharajgunj,Kathmandu
55	Seti Bittiya Sanstha Ltd.	2006/06/07	Tikapur, Kailali
56	Hama Merchant & Finance Ltd.	2006/06/16	Tripureshwor, Kathmandu
57	Reliable Finance Ltd.	2006/09/06	Sundhara, Kathmandu
58	Api Finance Ltd.	2007/04/25	Pokhara, Kaski
59	Namaste Bitiya Sanstha Ltd	2007/07/07	Ghorai, Dang
60	Kaski Finance Ltd.	2007/07/30	Pokhara, Kaski
61	Zenith Finance Ltd.	2007/10/08	Newroad, Kathmandu
62	Unique Financial Institution Ltd.	2007/10/12	Putalisadak, Kathmandu
63	Manjushree Financial Institution	2007/10/15	New Baneshor,
	Ltd.		Kathmandu
64	Subhalaxmi Finance Ltd.	2007/11/11	Naxal, Kathmandu
65	Jebil`s Finance Ltd.	2009/10/28	New Road, Kathmandu
66	Reliance Finance Ltd.	2009/12/03	Pradarsani Marg,
			Kathmandu
67	Lotus Investment Finance Ltd.	2010/04/11	Newroad, Kathmandu
68	Baibhab Finance Ltd.	2011/01/24	Naya Baneshwor,
			Kathmandu
69	Bhaktapur Finance Ltd.	2011/02/08	Chyamsing ,Bhaktapur

Source : Banking and Financial Statistics, Mid-July, 2012, Nepal Rastra Bank

# Fewa Finance Limited

**Comparative Balance Sheet** 

FY	2064/065	2065/066	2066/067	2067/068	2068/069
Ashad-End					
Capital & Liabilities					
Share Capital	70,000,000.00	130,091,000.00	273,000,000.00	300,300,000.00	300,300,000.00
Reserve Funds	34,163,135.18	42,167,896.78	59,702,610.81	53,610,353.00	77,675,363.00
Debenture and Bonds	-	-	-	-	-
Borrowings	-	-	-	-	-
Deposit Accounts	842,417,226.67	1,204,456,630.34	1,689,289,872.01	2,009,909,367.00	2,433,093,883.00
Bills Payable	-	-	-	-	-
Proposed Dividend	1,252,563.16	-	43,105,264.00	44,542,105.00	31,610,526.00
Income Tax Liability	11,511,979.72	582,753.25	3,208,319.57	1,215,872.00	2,918,092.00
Other Liabilities	37,747,005.13	24,422,095.29	55,799,112.06	53,451,614.00	47,343,678.00
Total Liabilities	997,091,909.86	1,401,720,375.66	2,124,105,178.45	2,463,029,311.00	2,892,941,542.00
Assets					
Cash	2,436,197.39	12,490,844.84	19,266,721.17	51,374,951.00	67,590,008.00
Balance with NRB	17,519,966.22	30,860,014.96	35,524,087.91	55,488,708.00	86,196,729.00
Balance with other Bank and Fis	1,240,377.94	10,032,999.77	3,152,499.80	5,025,172.00	4,711,249.00
Money at Call or Short Notice	120,660,285.10	231,710,183.35	394,725,412.24	436,065,641.00	562,343,617.00
Investment	3,050,000.00	3,050,000.00	550,000.00	39,744,000.00	550,000.00
Loan, Advances and Bills Purchased	838,095,374.82	1,104,899,740.09	1,641,671,859.80	1,827,905,215.00	2,114,536,302.00
Fixed Assets	2,918,019.79	5,993,616.69	18,360,728.35	29,516,087.00	38,677,605.00
Non-Banking Assets	-	-	-	-	-
Other Assets	11,171,688.60	2,682,975.96	10,853,869.18	17,909,537.00	18,336,032.00
Total Assets	997,091,909.86	1,401,720,375.66	2,124,105,178.45	2,463,029,311.00	2,892,941,542.00

Source: FFL, Annual Reports.

# Fewa Finance Limited

#### **Comparative Profit and Loss Account**

Particulars/	2064/065	2065/066	2066/067	2067/068	2068/069
Fiscal Years					
Interest Income	92,489,371.34	121,232,616.83	227,202,018.91	331,671,937.00	365,332,745.00
Interest Expenses	51,298,000.10	72,001,117.03	126,804,039.54	202,777,531.00	244,709,582.00
Net Interest Income	41,191,371.24	49,231,499.80	100,397,979.37	128,894,406.00	120,623,163.00
Commission and Discount	197,249.39	139,357.63	391,142.13	959,685.00	1,077,669.00
Other Operating Income	9,609,947.04	13,961,414.26	21,778,151.72	18,922,045.00	23,363,843.00
Foreign Exchange Gain	-	-	-	-	-
Total Operating Income	50,998,567.67	63,332,271.69	122,567,273.22	148,776,136.00	145,064,675.00
Staff Expenses	2,814,738.47	4,762,140.67	11,274,724.97	17,298,337.00	19,761,572.00
Other Operating Expense	4,495,000.39	9,109,701.39	17,208,548.37	23,193,589.00	30,685,150.00
Foreign Exchange Loss	-	-	-	-	-
<b>Operating Profit Before Provision</b>	43,688,828.81	49,460,429.63	94,083,999.88	108,284,210.00	94,617,953.00
Provision for Possible Losses	3,500,000.00	2,627,387.29	4,211,057.95	4,954,062.00	6,939,690.00
Operating Profit	40,188,828.81	46,833,042.34	89,872,941.93	103,330,148.00	87,678,263.00
Non-Operating Income/(Expenses)	11,735.30	(3,702.40)	11,739.96	-	(98,646.00)
Write Back of Provision for Possible Loss	-	-	-	-	-
Profit from Regular Activities	40,200,564.11	46,829,339.94	89,884,681.89	103,330,148.00	87,579,617.00
Extra Ordinary Income/(Expenses)	-	-	-	-	-
Profit Before Bonus and Taxes	40,200,564.11	46,829,339.94	89,884,681.89	103,330,148.00	87,579,617.00
Provision for Staff Bonus	3,654,596.74	4,257,212.72	8,171,334.72	9,393,650.00	7,961,783.00
Provision for Income Tax	11,523,002.40	13,564,609.94	24,559,866.14	28,186,649.00	23,942,300.00
Net Profit/(Loss)	25,022,964.97	29,007,517.28	57,153,481.03	65,749,849.00	55,675,534.00

Source : FFL, Annual Reports.

# List of On-Balance Sheet and Off-Balance Sheet Assets and Weight (Risk Weighted Assets Statement)

On-balance-sheet heads	Risk Weight
	(%)
Cash deposits	0
Gold deposit (tradable)	0
Deposits with Nepal Rastra Bank	0
Investment in Government of Nepal bond	0
Investment in Nepal Rastra Bank bond	0
Fixed receipt pledged loan extended against own fixed receipt to be most	0
secured	
Loan extended against security of government bond to be most secured	0
Accrued interests for government bond	0
Amount deposited in the Youth and Small Entrepreneurs Self-employment	0
Fund under the Deprived Sector Lending	
Claims of deposits/fixed receipts at the domestic banks and financial	20
institutions	
Fixed receipt pledged loan extended against fixed receipts of other banks and	20
financial institutions to be most secured	
Deposits with foreign banks	20
Money at call	20
Loan extended against guarantee of internationally rated licensed institution	20
Other investment made in internationally rated Banks	20
Inter-bank lending	20
Investment in shares, debentures and bonds	100
Other investments	100
Total amount (including loans, credit, and bills purchase/discount)	100
Fixed assets	100
Other net interests amount to be received	100
All other assets (except advance income tax payment)	100
Real estate/residential housing loans exceeding the Limits	150
Off-balance-sheet transactions	
Bills collection	0
Forward foreign exchange contract	10
Letter of Credit of less than six-month duration (full amount)	20
Guarantee issued against the guarantee of internationally rated foreign	20
licensed institution	
Letter of Credit of more than six-month duration (full amount)	50
Commitments relating to bid bond, performance bond and underwriting	50
Credit purchase/repurchase and takeover	50
Advance payment guarantee	100
Financial and other guarantee	100
Irrevocable loan commitment	100
Possible liabilities for income tax	100
All types of possible liabilities including Acceptance	100
Unpaid guarantee claims	200

Source : FFL, Annual Reports.

Calculation of trend (Linear) line using least square method

a) For L	LP				
<b>Fiscal Year</b>	LLPR (Y)	Period No. (X)	$(\mathbf{Y} \cdot \overline{\mathbf{Y}})^2$	$\mathbf{X}^2$	XY
2064/065	1.92	1	0.0841	1	1.92
2065/066	1.69	2	0.0036	4	3.38
2066/067	1.4	3	0.0529	9	4.2
2067/068	1.52	4	0.0121	16	6.08
2068/069	1.63	5	0	25	8.15
N=5	∑ <b>Y</b> =8.16	∑X=15	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 0.1527$	$\Sigma X^2 = 55$	∑XY=23.73

$$\overline{X} = \frac{\Sigma X}{n} = \frac{15}{5} = 3$$
  $\overline{Y} = \frac{\Sigma Y}{n} = \frac{8.16}{5} = 1.63$ 

 $b = \frac{\sum XY - n\overline{X}\,\overline{Y}}{\sum X^2 - n\overline{X}^2} = \frac{23.73 - (5 \times 3 \times 1.63)}{55 - (5 \times 3^2)} = -0.075 \qquad \sigma = \sqrt{\frac{\sum (Y - \overline{Y})^2}{n}} = \sqrt{\frac{0.1527}{5}} = 0.17$ 

$$a = \overline{Y} - b \,\overline{X} = 1.63 \cdot (-0.075 \times 3) = 1.857$$
  $CV = \frac{\sigma}{\overline{Y}} = \frac{0.17}{1.63} \times 100\% = 10.71\%$ 

Y = -0.075 + 1.857X

b) For TETI

Fiscal Year	TETIR (Y)	Period No. (X)	$(\mathbf{Y} - \overline{Y})^2$	$\mathbf{X}^2$	XY
2064/065	75.55	1	16.81	1	75.55
2065/066	78.57	2	1.1664	4	157.14
2066/067	77.08	3	6.6049	9	231.24
2067/068	81.31	4	2.7556	16	325.24
2068/069	85.72	5	36.8449	25	428.60
N=5	∑ <b>Y=398.23</b>	∑ <b>X=15</b>	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 64.1818$	$\Sigma X^2 = 55$	∑XY=1217.77

$$\overline{X} = \frac{\sum X}{n} = \frac{15}{5} = 3$$
  $\overline{Y} = \frac{\sum Y}{n} = \frac{398.23}{5} = 79.65$ 

$$b = \frac{\sum XY - n\overline{X}\,\overline{Y}}{\sum X^2 - n\overline{X}^2} = \frac{1217.77 - (5 \times 3 \times 79.65)}{55 - (5 \times 3^2)} = 2.308$$

$$a = \overline{Y} - b \overline{X} = 79.65 - (2.308 \times 3) = 72.722$$

$$\overline{Y} = \frac{\sum Y}{n} = \frac{398.23}{5} = 79.65$$

$$\sigma = \sqrt{\frac{\Sigma(Y - \overline{Y})^2}{n}} = \sqrt{\frac{64.1818}{5}} = 3.58$$

$$CV = \frac{\sigma}{\overline{Y}} = \frac{3.58}{79.65} \times 100\% = 4.50\%$$

Y=72.722+2.308X

c) For E	PE				
Fiscal Year	EPE (Y)	Period No. (X)	$(\mathbf{Y} - \overline{\mathbf{Y}})^2$	$\mathbf{X}^2$	XY
2064/065	1.32	1	0.1849	1	1.32
2065/066	0.67	2	0.0484	4	1.34
2066/067	0.95	3	0.0036	9	2.85
2067/068	0.91	4	0.0004	16	3.64
2068/069	0.61	5	0.0784	25	3.05
N=5	$\Sigma \mathbf{Y} = 4.46$	∑X=15	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 0.3157$	$\Sigma X^2 = 55$	∑XY=12.20

$$\overline{X} = \frac{\sum X}{n} = \frac{15}{5} = 3$$

$$b = \frac{\sum XY - n\overline{X}\,\overline{Y}}{\sum X^2 - n\overline{X}^2} = \frac{12.20 - (5 \times 3 \times 0.892)}{55 - (5 \times 3^2)} = -0.118$$

$$a = \overline{Y} - b \overline{X} = 0.892 \cdot (-0.118 \times 3) = 1.246$$

$$\overline{Y} = \frac{\sum Y}{n} = \frac{8.16}{5} = 0.892$$

$$\sigma = \sqrt{\frac{\Sigma(Y-\overline{Y})^2}{n}} = \sqrt{\frac{0.3157}{5}} = 0.25$$

 $CV = \frac{\sigma}{\overline{Y}} = \frac{0.25}{0.892} \times 100\% = 28.08\%$ 

d) For R	d) For ROE							
Fiscal Year	ROE (Y)	Period No. (X)	$(\mathbf{Y} - \overline{\mathbf{Y}})^2$	$\mathbf{X}^2$	XY			
2064/065	24.02	1	33.0625	1	24.02			
2065/066	16.84	2	2.0449	4	33.68			
2066/067	17.18	3	1.1881	9	51.54			
2067/068	18.58	4	0.0961	16	74.32			
2068/069	14.73	5	12.5316	25	73.65			
N=5	∑ <b>Y=91.35</b>	∑ <b>X</b> =15	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 48.9232$	$\Sigma X^2 = 55$	∑XY=257.21			

$$\overline{X} = \frac{\Sigma X}{n} = \frac{15}{5} = 3 \qquad \qquad \overline{Y} = \frac{\Sigma Y}{n} = \frac{91.35}{5} = 18.27$$
$$b = \frac{\Sigma XY - n\overline{X}\overline{Y}}{\Sigma X^2 - n\overline{X}^2} = \frac{257.21 - (5 \times 3 \times 18.27)}{55 - (5 \times 3^2)} = -1.684 \qquad \sigma = \sqrt{\frac{\Sigma (Y - \overline{Y})^2}{n}} = \sqrt{\frac{48.9232}{5}} = 3.13$$
$$a = \overline{Y} - b \,\overline{X} = 18.27 \cdot (-1.684 \times 3) = 23.322 \qquad \qquad CV = \frac{\sigma}{\overline{Y}} = \frac{3.13}{18.27} \times 100\% = 17.12\%$$

Y=23.322+(-1.684)X

e) For RO	Α				
Fiscal Year	ROA (Y)	Period No. (X)	$(\mathbf{Y} - \overline{Y})^2$	$\mathbf{X}^2$	XY
2064/065	2.51	1	0.0196	1	2.51
2065/066	2.07	2	0.09	4	4.14
2066/067	2.69	3	0.1024	9	8.07
2067/068	2.67	4	0.09	16	10.68
2068/069	1.92	5	0.2025	25	9.6
N=5	∑ <b>Y=11.86</b>	∑ <b>X=15</b>	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 0.5045$	$\Sigma X^2 = 55$	∑XY=35

$$\overline{X} = \frac{\sum X}{n} = \frac{15}{5} = 3$$

 $b = \frac{\sum XY - n\overline{X}\,\overline{Y}}{\sum X^2 - n\overline{X}^2} = \frac{35 - (5 \times 3 \times 2.37)}{55 - (5 \times 3^2)} = -0.058$ 

$$\overline{Y} = \frac{\Sigma Y}{n} = \frac{8.16}{5} = 2.37$$

$$\sigma = \sqrt{\frac{\Sigma(Y-\overline{Y})^2}{n}} = \sqrt{\frac{0.5045}{5}} = 0.32$$

 $a = \overline{Y} - b \overline{X} = 2.37 \cdot (-0.058 \times 3) = 2.546$   $CV = \frac{\sigma}{\overline{Y}} = \frac{0.32}{2.37} \times 100\% = 13.33\%$ 

Y=2.546+(-0.058)X

f) For NIM								
Fiscal Year	NIM (Y)	Period No. (X)	$(\mathbf{Y} - \overline{\mathbf{Y}})^2$	$\mathbf{X}^2$	XY			
2064/065	4.90	1	0.5041	1	4.90			
2065/066	4.44	2	1.3689	4	8.88			
2066/067	6.10	3	0.2401	9	18.30			
2067/068	6.90	4	1.6641	16	27.60			
2068/069	5.70	5	0.0081	25	28.50			
N=5	∑ <b>Y=28.04</b>	∑ <b>X=15</b>	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 3.7853$	$\Sigma X^2 = 55$	∑ <b>XY=88.18</b>			

$$\overline{X} = \frac{\Sigma X}{n} = \frac{15}{5} = 3 \qquad \qquad \overline{Y} = \frac{\Sigma Y}{n} = \frac{28.04}{5} = 5.61$$

$$b = \frac{\Sigma XY - n\overline{X}\overline{Y}}{\Sigma X^2 - n\overline{X}^2} = \frac{88.18 - (5 \times 3 \times 5.61)}{55 - (5 \times 3^2)} = 0.046 \qquad \qquad \sigma = \sqrt{\frac{\Sigma (Y - \overline{Y})^2}{n}} = \sqrt{\frac{3.7853}{5}} = 0.87$$

$$a = \overline{Y} - b \overline{X} = 5.61 - (0.046 \times 3) = 4.39 \qquad \qquad CV = \frac{\sigma}{\overline{Y}} = \frac{0.87}{5.61} \times 100\% = 15.52\%$$

Y=4.39+0.046X

g) For EF	PS				
Fiscal Year	EPS (Y)	Period No. (X)	$(\mathbf{Y} - \overline{Y})^2$	$\mathbf{X}^2$	XY
2064/065	35.74	1	90.4401	1	35.74
2065/066	31.88	2	31.9225	4	63.76
2066/067	20.93	3	28.0900	9	62.79
2067/068	24.08	4	4.6225	16	96.32
2068/069	18.54	5	59.1361	25	92.70
N=5	∑ <b>Y=131.17</b>	∑ <b>X=15</b>	$\sum (\mathbf{Y} - \overline{\mathbf{Y}})^2 = 214.2112$	$\Sigma X^2 = 55$	∑XY=351.31

$$\overline{X} = \frac{\Sigma X}{n} = \frac{15}{5} = 3 \qquad \qquad \overline{Y} = \frac{\Sigma Y}{n} = \frac{131.17}{5} = 26.23$$
$$b = \frac{\Sigma XY - n\overline{X}\overline{Y}}{\Sigma X^2 - n\overline{X}^2} = \frac{351.31 - (5 \times 3 \times 26.23)}{55 - (5 \times 3^2)} = -4.22 \qquad \sigma = \sqrt{\frac{\Sigma (Y - \overline{Y})^2}{n}} = \sqrt{\frac{214.2112}{5}} = 6.55$$
$$a = \overline{Y} - b \,\overline{X} = 26.23 \cdot (-4.22 \times 3) = 38.894 \qquad \qquad CV = \frac{\sigma}{\overline{Y}} = \frac{6.55}{26.23} \times 100\% = 24.95\%$$

Y=38.894+(-4.22)X

### **APPENDIX 6**

#### Calculation of Industrial Average Ratio (IAR) for liquidity ratios of Aggregate Finance Companies

Amount in NRs.'000

Fiscal Year (Ashad End)	2064/065	2065/066	2066/067	2067/068	2068/069
No. of Finance					
Companies	78	77	79	79	69
Liquid Assets	17,741.74	16,406.55	21,717.93	20,510.98	26,883.96
NRB Balance	3,852.60	2,266.98	2,538.26	2,410.04	3,916.06
Cash in Vault	588.37	605.45	949.55	1,219.92	1,346.98
Total Deposit	52,282.17	57,073.44	77,406.35	85,476.88	76,115.75
Liquid Assets/Total Deposits (%)	33.03	28 75	28.06	24.00	35 37
NRB Balance/Total	55.75	20.15	20.00	24.00	55.54
Deposits (%)	7.37	3.97	3.28	2.82	5.14
Cash in Vault/Total					
Deposits (%)	1.13	1.06	1.23	1.43	1.77

Source : Banking and Financial Statistics (2008 -2012), Nepal Rastra Bank.