## CHAPTER-I

## INTRODUCTION

## 1. BACKGROUND OF THE STUDY

### 1.1 STANDING AT THE NEPALESE ECONOMY

Nepalese economy is different in its character from the regional economies, poverty, less developed geographical situation, technological backwardness, land locked and dominated by two large economies, etc. are the main features of Nepalese economy. Most of the population of the country is in the rural areas, where there is no access of banking facilities. Due to lack of awareness and guidance to the poor, the poor are still in severe condition at many places. From the beginning of the 1970s same programmed were introduced focused to rural and the poverty -stricken areas people. But these programs did not achieve significant result in the area of the poverty reduction. The population below the poverty line is still $38 \%$ by end of the Tenth-five year plan.(Tenth Plan)

Nepal has no long history or banking sector as compared to other developed country in the world. Bank is the lifeline of a nation and its people. In regard of commercial Banks, they are integral parts of the economy in all countries. Outside the commercial Banking realm there are several financial institutions that affect financial operation in a country. The place if commercial Banks in financial system is more significant to play increasingly dynamic and vital role in the economy of the least developed countries like ours, which provides economic and financial intermediation in the economy.

Prior to the establishment of the Nepal Bank Limited, there was no organized financial institution in Nepal. During the prime ministership of Ranodip Singh around 1877 AD a number of economic and financial reforms were introduced. The establishment of the Teejarath adda was the outcome of that reform. Adda may be regarded as the father of modern Banking institution and for quite a long time in tended a good service to government servants as well as to the general public. How eve the installation of 'Kausi Tosha Khana' as a Banking agency during the regime of king Prithive Narayan Shah could also lay claim to be regarded as the first step to wards initiating Banking Development in Nepal.

The inception of Nepal Bank Limited (NBL) in 1937 was a landmark in the fields of Banking and financial sector in Nepal. It was established under special

Banking Act 1936 having elementary function of commercial Bank as a semi government organization, the central Bank named as Nepal Rastra Bank (NRB) was established in 26 th April 1955 with as objective of supervising, protection and direction the function of Commercial Banking Activities. Another Commercial Bank fully owned by the government named as Rastriya Banijya Bank (RBB) was established in 1966. Later on large number of Commercial Banks has been com into operation till date.

Government involvement in business, trade and transit was indispensable the end of the $18^{\text {th }}$ century through few sole trading were also in existence during that pursued Adam Smith through his popular 'Wealth of Nation' advocated minimum government intervention in business in 1776 AD through his first treatise on economic development. He suggested government to develop adequate infrastructure to promote the business rather actively participate in it. Major economic in the world followed Smith fill they approached great depression in 1929 AD. The year 1929-30 proved Smith theory's of invisible hand's to be unsuccessful and left the growing economics of the world at crossroad. To overcome the sudden and unexpected disaster in the economy, Keyn's theory of multiplier came which redefined the role of government and suggested it to invest a lot in business to mitigate the problems of unemployment and scarcity of affective demand in the market. Thus adoption Keynesian theory, once again, the world economy moved towards mixed economy. The USSR started to use the concept of planned economic development from the same time.

During the 1970 's the economic development come to be redefined in terms of reducing the rate of poverty and unemployment. In order to boost up the economy of any country both public and private firm must play vital role, the concept of public enterprise was emerged in the USA during the regime of Roosevelt through his 'View Deal.' Although other countries is also followed this concept that public enterprise couldn't run smoothly while arriving in 70's decades.

Their productivity declined and ultimately they resulted in heavy loss. The oil price hike of 1973 forced even developed countries to flash back their economic structure. This wave of privatization, slowly speed all over the world. Ending years 1980's and beginning of 90's are characterized by the political change. Germany unified USSR split up and changed its socialist pattern of economy. Centralized economy of China slightly directed towards liberalization in 1990's led to global economy. The emergency of economic alliance and powerful blocks had changed the international trading system. About 200 countries of the world at present have divided in to 170's alliance in the form of economic grouping and trade block such as EU, ASEAN and SAARC etc.

Gradually ascending economy in East Asian again encountered crisis in 1997 which affected Russia and Brazil too; leaving some impacts on global. Economy in
most of the developing countries, growth remained weak and below price crises trend. But the negative impact of crisis didn't last long and now by the beginning of new millennium, those economic affected nation have also regained their reforming pattern. At present, economy of America having been grown continuously since last decade is still in boom condition. China is emerging as economic super power. World Trade Organization has changed whole world to single market unit without any basis and hindrances.

Developed countries have opened their market not only scare raw material form developing countries but also finished good with economic quality. Economic Development in Nepal is really started only after Rana regime. In the late period of Rana regime, some positive attempts were made. As a result dog perished 'for its existent in 1935 AD, Biratnagar Jut Mill in 1936 AD and Raghupati Jute Mill in 1946 AD. Before the break of Second World War a twenty year plan was announce and national planning committee was set up in 1949 AD.

But plan never came to the notice of people and this idea disappeared with the dissolution of national planning committee. Nepal in early 1950's, began the process of economic and social development in spit of lack of modern institutions and infrastructure. Budgetary system was introduced in 1952 AD (2008 BS). In the same year a separate ministry for planning and development was established for uplifting the nation. It is forty four years since the first five years plan was executed up to now nine successive plan have already been implemented and tenth planed is running. A cursory look at those plans show that the major focus has been on agro-sector industrial sector, poverty alleviation and in the field of infrastructure development.

Thus the present study focuses on the comparative financial performance analysis of Nepal SBI Bank Ltd. and Nepal Investment Bank Ltd. For this purpose an evaluation of position of the Banks with respect to liquidity, leverage, capital adequacy, turnover and profitability and the relationship between various variable are made. This study assumes the hypothesis that the performance of sampled Banks does not differ significantly.

### 1.2 COMMERCIAL BANKING AND ACTIVITIES

### 1.2.1 Origin of the Banks

In the past, Bank used just to accept deposits form the savers of money (surplus units of the society) and give loans to the users of money (deficit units of the society).

Savers of money are those units whose earning exceeds expenditure on real assets (land, building, cloth, food etc) and users of money are those units whose expenditure on real assets exceeds their earnings. In such a situation, deficit units sell their securities/ IOUs (I OWE YOU) to surplus units. These securities are financial assets. If entire income of a unit matches with investment on real assets no financial assets are created. ${ }^{1}$

The evolution of Banking can be traced back to the era when the use of metallic coins as the media of exchange of goods and services began. Storage of metallic coins was a serious problem for the common people. Because of the danger of theft and robbery, people started leaving gold and silver and metallic coins in the custody of some reputed person a wealthy merchant or a money changer. The custodian had s strong box and other means of safe keeping. He offered this service as favors for his friends or made a charge for it. The depositor had to go personally to custodian for the withdrawal of his money. But this practice was found to be inconvenient.

How did the use of word Bancus become popular? The origin of 'Bank' is traced to Latin word 'Bancus' which means a bench. European money-lender and moneychangers used to transact their business at bench at benches or tables. They followed the practice of receiving gold and other metals as deposits and issuing receipts. The bench or table used by the trader in money was the symbol of the business of Banking or dealing in money. The success of failure in trading was associated with his bench when a Banker railed his bench used to be destroyed by the people.

### 1.3.2 Origin and Growth of Banks in Nepal.

The growth of Banking in Nepal is not so long in comparison with other developing or developed country, the institutional Development in banking system of Nepal is far behind Nepal had to wait for long time to come to the present Banking position. The stepwise Development of Banking in Nepal can be narrated as follows.

### 1.3.2.1 Nepal Bank Ltd:

Nepal Bank Ltd (1994, $30^{\text {th }}$ Kartik) and was established under the Nepal Bank Act 1994 (BS). Its initial authorized capital was 10 million rupees and issued capital was 25 lakh and paid up capital was 8 lakh 42 thousand.

### 1.3.2.2 Nepal Rastra Bank:

The Nepal Rastra Bank Act 2012, Nepal Rastra Bank was established in 2013 (BS), Baishakh 14th but this Act has been replaced and the Nepal Rastra Bank Act 2058 has been upcoming.

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### 1.3.2.3 Rastriya Banijya Bank:

Rastriya Banijya Bank was another important Bank established in Nepal. The Bank was established in the government sector in 2002 BS. After connection the commercial Bank Act 2031, both the Banijya Bank Act 2020 and the Rastriya Banijya Bank Act 2021 were replaced.

### 1.3.2.4. Agriculture Development Bank:

Under the Agriculture Development Bank Act 2024, the Agricultural Development Bank (ADB) was established on 2024 7th Magh. Prior to the establishment of ADB , a cooperative Bank was established to meet requirement of fund in the agriculture sector. But latter on this cooperative Bank was converted into Agriculture Development Bank.

### 1.3.2.5. The Modern Phase of Banking Development:

The process of the Development of Banking system in Nepal was not satisfied up to 2040. No Bank was opened from during this period except expanding the branches and branches of the Banks which were established in the earlier period. Nepal was observing the event that was taking places in the world also.

Nepal was deeply studying and searching what sorts of programs, policies, law and regulation should be brought into the practice. The country can't change it status by using only its own capital in the country without importing the new technology from foreign country. Accordingly, law and policy have been enacted by the state to encourage the foreign investment on banking sector. As a result of it the Development of the Banking system started in Nepal. The competition began to grow, the Banks began to offer their valuable service to the people through new technology. This was the great significant event. Thus, some Banks were opened on the joint investment basis Brief accounts of such Banks are as follows.

1. Rastra Banujya Bank Ltd 2
2. Nepal bank Ltd
3. NABIL Bank Ltd.
4. Nepal Investment Bank Ltd.
5. Standard Chartered Bank Ltd.
6. Himalayan Bank Ltd.
7. Nepal SBI Bank Ltd.
8. Nepal Bangladesh Bank Ltd .
9. Everest Bank Ltd.
10. Bank of Kathmandu Ltd.

11 Nepal Credit and Commerce Bank Ltd.
12. Nepal Industrial Commercial Bank Ltd.
13. Lumbini Bank Ltd. Narayanghat.
14. Kumari Bank Ltd. Kathmandu.
15. Machapuchre Bank Ltd. Pokhara
16. Laxmi Bank Ltd.
17. Siddhartha Bank Ltd.
18. Global Bank Ltd.
19. Citizens Bank International Ltd.
20. Prime Commercial Bank Ltd.
21. Bank of Asia Nepal Ltd.
22. Sunrise Bank Ltd.

23 Clean Energy Bank Ltd.

Hence there are so many Commercial Banks in operation in Nepal till date operating with their main objectives of carrying out activities under the Commercial Bank Act. 2031 and Nepal Rastra Bank Act. 2058. The company Act. 2053.

After the restoration of democracy in Nepal, there is tremendous development in banking sectors. Different types of banking activities are being operated. It has played positive role in the economy activities. Till now apart from Commercial Bank five Rural Development Banks are in operation in Nepal. They are as follows.

- Eastern Rural Development Bank Ltd.
- Far Western Rural Development Bank Ltd.
- Western Rural Development Bank Ltd.
- Mid Western Rural Development Bank Ltd.
- Middle Rural Development Bank Ltd.

The main objectives of these Banks is to uplift the living standard of the people by providing them the necessary training and Banking services and providing loan with out security group basis as well as personal basis to operate an income generating business, these Banks established according to the Rural Banks System by the government of Bangladesh with the objectives of providing loan to the poor people who are deprived from the institutional loan facilities due to the lack of reasonable security and guarantee. The Rural Development Banks have their own fundamental concepts every man has his own characteristics and skills. The Rural Development Banks have a concept, it can bring the poor mass of people in the level of respectable living standard providing the opportunity to the rented people and oppressed to increase the income and create the productive poverty.

Before the introduction of Nepal Development Bank Act 2052, the Nepal Industrial Development Corporation and the Agricultural Development Bank were established but after this Act various Development Banks have been opened in the different place of Nepal. They are performing their function according to their
objectives. These Banks have given benefits to their owners and they are also helping, the people and the nation in the process of economic development directly of indirectly. After the introduction of the Development Bank Act 2052 more than 16 Banks are established in the different part of the country. It is clear that the establishment of the different mentioned Banks is also the Development of Banking field in Nepal.

### 1.3.3. Factor Affection the Banks Business.

a) The directive issued by Nepal Rastra Bank particularly with regard to recognition of interest income, loan loss provisioning and single borrower and group exposure limits are binding guidelines for Banks and hence are bound to have impact on the income of the Banks in the short run.
b) Funs management has become a challenge for the Banks with increasing lack of opportunities for profitable investments.
c) Persistent slackness in economic activities has adversely affected the recovery of investment incomes of the Banks have been affected by this.
d) Crisis of confidence witnessed in the business community on account of the prevailing environment may limit additional lending opportunities to a greater extent.

### 1.3.4. Development to Commercial Bank in Nepal.

Like other countries goldsmiths, merchants and money lender were the ancient. A banker of Nepal Teejarath Adda established during the tenure of the Prime Minister Ranodip Singh was the first step towards the institutional development of Banking in Nepal. Teejaraht Adda did not collect deposits from the public but gave loans to employees and public against the bullion.

Banking in modern sense started with the inception of Nepal Bank Limited (NBL) on 1994 BS. NBL had a Herculean responsibility of attraction people toward banking sector from pre-dominant money lenders' net and of expanding Banking services. Being a commercial Bank, it was natural that NBL paid more attention to profit generation business and preferred opening branches at urban centers. Government however had onus of stretching banking services to the nook and corner of the country and also managing financial system in a proper way.

Thus, Nepal Rastra Bank (NRB) was set up on 2013 as central Bank under Nepal Rastra Bank Act 2012, it has been functioning as the government's Bank and has contributed to the growth of financial sector. The major challenge before Nepal Rastra Bank today is to ensure the robust health of financial institution. Accordingly, NRB has
been trying to change them and has introduced a host of prudential measures to safeguard the interest to the public. NRB is yet to do a lot to prove them an efficient supervisor. NRB rally requires strengthening their policy making, supervision and inspection mechanism. Integrated and speedy Development of the country is possible only when competitive Banking service reaches nook and corners of the country.

Keeping this in mind, government set up Rastriya Banijya Bank (RBB) 2022 as s fully government owned Commercial Bank. As the name suggests, Commercial Banks are to carry out commercial transaction only. But Commercial Banks had to carry out the functions of all types of financial institutions. Hence, Industrial Development Center (IDC) was set up in 2013 for industrial development. In 2016, IDC was converted to Nepal Industrial Development Corporation (NIDC). Similarly, Agricultural Development Bank (ADB) was established in 2024 to provide finance for agricultural techniques. Moreover, Security Exchange Center was established in 1976 to enhance capital market activities.

Securities Exchange Center was renamed and its functioning was converted to an organized Stock Exchange, NEPSE opened its trading floor on 13 January 1994, with the establishment of RBB an ADB, Banking service spread to both the urban and rural areas. NRB also gave incentive to NBL to expand their branches to Rural areas this helped the common people reduce their burden of paying higher rate of interest to lenders. The inception of Nepal Arab Bank Limited (renamed as NABIL Bank Limited since first January 2002- in BS 2041) as a first joint venture Bank proved to be a milestone in the history of Banking. NABIL Bank gave new ray of hope to the sluggish financial sector. NABIL launched its operation with a marketing concept, i.e. customer is the king in the market.

NABIL started knocking the doors of customer breaking than trend of knocking the door of a Bank by a customer. NABIL seems to have truly followed the definition of customer given by Mahatma Gandhi 'A customer is the most important visitors on our premises. He does not depend on us.

We are dependent on him. He is not an interruption on our business. He is purpose of it. He is not outsider on our business. We are not doing him a favors by serving him. He is doing us a favors by giving us an opportunity to do so.' The very marketing concept of NABIL forced the Bank in operation to be more customers oriented and led the favor of commercial Banks. Having observed the success of NABIL based on marketing concept and also because of liberal economic policy adopted by the successive governments following commercial Banks came into being. ${ }^{2}$

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### 1.3 PROFILE OF THE SAMPLE BANKS

### 1.3.1 Nepal Investment Bank Limited:

Nepal Investment Bank Ltd (Nepal Indosuez bank Ltd) was established on 16th Falgun 2041 as a third joint venture bank under the company act 1964. Initially Banque Indosuez Paris manages the bank, in accordance with joint venture and technical services. Fifty percents of the shares of Nepal Indosuez Bank Ltd held by credit Agricole.

Indosuez was sold to the Nepalese promoters on 25 April 2002 as per the transaction report of NEPSE. After this divestment of shares by Nepalese owners, the name of the company was changed to Nepal Investment Bank Ltd. By its 15th A.G. M held on May 31, 2002.

Out of total equity shares of Nepal Investment Bank Ltd, a group of companies, $15 \%$ hold, $50 \%$ shares by commercial banks another $15 \%$ by financial institutions and remaining $20 \%$ by general public. Authorized capital of NIBL is Rs. 590 Million and issued and paid up capital are 299.9845 million. The bank has 17 branches different places in the nation.

### 1.3.2 Nepal SBI Bank Limited:

Nepal SBI Bank Ltd was established in 2050 it started its operation on $23^{\text {rd }}$ Ashad 2050. It is an association of state Bank of India and Nepalese Entrepreneurs regarding the composition to equity capital state Bank of India, general public Employees provided fund and Agriculture Development Banks share 50\%, 30\%, 15\% and $5 \%$ respectively under the technical services agreement signed between two Banks state Bank of India has been providing top management services to the Bank. The Bank operates with the objectives of providing loan to industry, commerce and trade.

The bank has (fourteen) branches in various parts of the kingdom. Its corporate office located is Hattishar, Kathmandu and main branch office in Durbar Marg, Kathmandu. It has another branches located in New road, and embassy of India extension counter and remaining are outside of the valley i.e. Biratnagar branch, Birtamaode, Bhairahawa, Pokhara, Janakpur, Rampur Branches. Rural branch: Birtamode Rural, Sishwa Rural Branch, Pokhara extension counter, Dharan extension counter. The Bank has utilized advance computerized techniques in its operation. The software in the use is developed by forces technology, India.

These provide following facilities:

1. It provides loan and advance by means of term loans as well as working capital.
2. It provides its facilities of opening latter of credit and guarantees.
3. It provides remittance facility to various part of the world.
4. It provides merchant Banking facilities.

### 1.4 FOCUS OF THE STUDY

This study will focus on the comparative financial performance of NIBL and NSBIBL from the period of 2002/03to2006/07. In this study, attempt will be made get knowledge about financial performance, mobilizing its capital funds, the earning capacity, efficient use of assets and proper utilization of funds its to identifying the financial weakness and strength of the two particular JVBs. The main focus of the study is about comparative study of financial performance between Nepal Investment Bank Ltd and Nepal SBI Bank Ltd.

Similarly this study forecast the deposit, net worth, net profit, and loan and advance, investment, EPS, MVPS in terms of five years least square linear trends. Similarly the study tries to find out the correlation between specific variables. And also the study will try to find out the causes leading to better performance of the Bank; even both are the joint venture Bank. For the purpose of this study evaluation of the Banks is made with respects to liquidity, leverage, capital adequacy, turnover and profitability and tests the relationships between various variable. The study assumes the hypothesis that the performance to sampled Bank does not differ significantly and will also involve the presentation, analysis, suggestion, conclusion and suggestion on the specific subject matter.

### 1.5 STATEMENT TO THE PROBLEMS

The number of joint venture Banks is being increased in response to the economic liberalization policies of the government besides joint venture commercial Banks are also being registered by the Nepalese promoters.

Other Most of the business organization along with Banks are facing different problems due to the lack of political stability and unrest. Bank has being facing the considerable pressure to lower the lending rates, which affects the profitability adversely. The problems of the study refer the comparative study of strength and weakness of the Nepal SBI Bank and Nepal Investment Bank. Although the study is not compressive as expected, attempts are made to sort out the answer for the following question.

1. How far Nepal SBI Bank and Nepal Investment Bank have been able to shift the monetary resources from the savers to users?
2. What is the financial growth condition of two Joint Venture Bank?
3. Is their a value maximizing financial position?
4. What is the comparative position of tow firms in respect of their financial performance?

### 1.6 OBJECTIVE OF THE STUDY

The basic objectives of the study is to analysis the Financial Performance of two joint venture Banks for the past five years and also find out the causes of the high and low performance. It is study about the financial performance of two firms (Bank) by studying the detail data. It tries to evaluation the overall financial performance of Nepal Investment BL and NSBIBL by using various tools such as statistical tools and financial tools.

The main objectives of this study are as follows:

1. To examine the comparative study on the financial performance of Nepal Investment Bank Ltd. and Nepal SBI Bank Ltd.
2. To examine into the financial statement of the latest minimum five year to examine financial performance.
3. To forecast the financial performance for coming five years and find out the correlation coefficient between the financial variables.
4. To provide and draw the conclusion and make some suggestive framework and recommendation to meet the objectives.

### 1.7 SIGNIFICANCE OT THE STUDY

The study evaluates the financial performance of two firms. The study compares the financial performance by using of Ratio Analysis which helps the concerned companies to formulate strategies to face the increasing competition and to achieve the targeted objectives.

Similarly the aim of the study is to identify the financial problems. It provides a useful feedback, remedial actions, good financial planning and takes appropriate divisions to the policy makers to the selected organization, governments and also the other concerned field.

Likewise the research will provide required information to the persons and parties such as general readers, decision makers, brokers traders, stock holders financial agencies, businessman and general public and also useful for teacher and students of the particular subjects and the firms and others those having interest on financial management.

### 1.8 LIMITATIONS OF THE STUDY

There are about twentyfour Commercial Bank is running in different sectors. They are competing with each other.

Following are the limitations of the study made.

1. The study is for fulfilling the partial requirement of MBS course of TU. Nepal.
2. The study covers the analysis of only five years data.
3. The whole study will be based on the secondary data collected from central office, Nepal Investment Bank and Nepal SBI Bank. Therefore the limitation of data derived from financial statement exists. It focuses only the financial performance and doesn't cover other aspects of activities.
4. This study is limited to the comparative study of two joint ventures Bank only.
5. Due to the difficulties of data available only ordinary and simple techniques have been used for the analysis of the date.

Having felt the limited time and limited resources, this study does not examine the factor affecting the financial performance in different sectors.

### 1.9 CHAPTER PLAN.

This research has been divided into five parts, which are as follows:
CHAPTER I: First parts deals and includes the background of the study, introduction of the study, focus of the study, statement of the problems, objectives of the study, significance of the study, limitations of the study, and plans of the study.

CHAPTER II: Second chapter includes the review of literature, which was obtained during the library research, theoretical review, and review of related studies.

CHAPTER III: Chapter third Research methodology contents research design, population and sample, source of date, data collection and processing techniques, analysis of tools.

HAPTER IV: This part of the study includes a presentation and analysis of data.

CHAPTER V: Last part of the study deals together with the summary conclusion and recommendation.

## CHAPTER-II

## REVIEW OF LITERATURE

### 2.1. INTRODUCTION

This chapter highlights upon the existing literature and research related to the present study with a view to functioning out what had already been explained and how the present research adds to his dimension. This chapter attempts to review the following relevant literature to make the thesis effective.
2. 1.1. Review of supportive texts.

* Review of books.
* Review of legislation related to Commercial Bank.
* Review of other relevant books.
* Review of reports.
2.1.2. Review of previous thesis.


### 2.1.1 Review of Supportive Tests.

### 2.1.1.1. Conceptual review of Commercial/Joint Venture Banks:

'A bank is a business organization that receives and holds deposits of funds from others, makes loans, extends credit and transfer funds by written under order of depositors.' A Commercial band is one which exchanges money, deposits money, accepts deposits, grants loans and performs commercial banking functions and which is not a bank meant for co-operative, agriculture, industries or for such specific purpose. ${ }^{3}$

[^2]A joint venture is the joining of forces between two or more enterprise for the purpose of carrying out specific operations (industrial or commercial investment, production and trade). ${ }^{4}$

### 2.1.1.2. Review of journals related to Joint Venture Bank:

When government decided to establish banks with joint ventures, tow benefits were expected. First that competition would force domestic banks, such as Nepal Bank limited and Rastriya Banijya Bank to improve their services and efficiency, second that introduction of new banking procedures methods and technology would occur. ${ }^{5}$

There has been substantial growth in the number of joint venture banks in Nepal since 1990s. The basic reason behind this is the government's deliberate policy of allowing foreign joint venture banks to operate in Nepal. Government's liberalization policy also encourages the traditionally run domestic commercial banks to enhance their efficiency and competitiveness through modernization, mechanization, and computerization and prompt customers' services by setting them to the exposure of the joint venture banks. ${ }^{6}$

The existence to foreign joint venture banks has presented an environment of healthy competition among the existing commercial banks. The main beneficiary of this is the band client. The increased competition forces the existing banks to improve their quality and extend services by simplifying procedures and by training, motivation own staff to respond to the new challenges ${ }^{7}$.

The joint venture bans are in a better position than local commercial banks in profit making. In an average, no freight banks have suffered loss till now, but local banks owned negative profits. ${ }^{8}$

Despite the increase in number, the joint venture banks are concentrated in urban centers, especially in major cities, which ass their headquarters in Kathmandu alone accept that of Nepal Sri-Lanka bank, which is based in Rupandehi. This trend has resulted in two-way effects on the operation of the government owned commercial banks in Nepal.

First the comparatively attractive interest rates and devices promptness of these private banks have drawn the public deposit to their side thereby reducing financial

[^3]liabilities of the government- operated commercial banks have been forced to shut down some of their branches in the remote areas of the country.

Nevertheless a look at the activities of these joint venture banks provide a fill up in to the tremendous aid they provide to the national economy. They have been instrumental in mobilizing capital more effectively and to a large extend. Especially they have been more helpful in founding the private sector.

### 2.1.1.3. Financial Analysis:

Financial analysis involves the use of various financial statements. The first is the balance sheet, which represents a snapshot of the firms' financial position at the movement in time and next is the income statement that depicts a summary of the firm's profitability over time. ${ }^{9}$
i) Profit \& Loss $A / C$
ii) Balance Sheet

Profit \& Loss a/c: It is main accounting system of an organization, which reflects the profit or loss of the whole year. In the business house or government office or company, accountant has to maintain the journal, ledger and trail balance first, there after all the transactions entries are recorded in $\mathrm{P} / \mathrm{L} \mathrm{a} / \mathrm{c}$, and then it is help to find out the firm's condition profit or loss.

In P/L a/c, all the company's expenses are recorded in debit side and incomes are credited. If debit side's amount is more than credit, it is understand the company is going to loss. Similarly, if credit side's amount is more, the company is in profit.

Balance sheet: It is the backbone of the organization. It is accumulation of all the transaction of an organization. Journals, ledger, trail balance, trading a/c and p/l a/c is knocked to the balance sheet. They are kept for balance sheet.

It has two sides: liability and assets. All liabilities like, capitals, general reserve fund, creditors are entered in liability side. And if profit, it added to shareholder's capital, if loss subtracts from shareholder's capitals. All the assets, like debtors, furniture, machinery, vehicles, cash, closing stock are entered in assets.

Analysis and interpretation of profit \& loss a/c and balance sheet is an attempt to determine the financial performance of any organization so that a forecast may be made

[^4]of the prospects for future earning, ability to pay interest, debt maturity and probability of a sound dividend policy.

In the words of Myers, 'Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single set of statement and a study of tends of these factors as shown in series of statement. ${ }^{10}$

Financial Analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationships between the items of the balance sheet and the profit and loss account in a proper way. ${ }^{11}$

It is also the analytical and judgmental process that helps answer questions that have been posed. Therefore, it is means to end. Apart from the specific analytical answers, the solutions to financial problem and issues depend significantly on the views of the parties involve in the relative issues and on the nature and reliability of the information available. ${ }^{12}$

Beside, it can be taken as the starting point for making plans before using any sophisticated forecasting and planning procedures. Financial data can be sued to analyze a firm's past performance and assess its present financial strength. Management of the firma would be particularly interested in knowing the financial strength to make their best use and to spot out the financial weakness to take corrective actions.

The analysis make an attempt to dissect the financial statements into their components on the basis of the purpose on one hand and individual companies and total of these items on the other. In course of study and evaluation the financial position of the organization, a study of trends of various important factors over the past several is also undertaken to have clear understanding of changing profitability and financial condition the business organization. ${ }^{13}$

Financial statement analysis involves a comparison of a firm's performance with that of other firms in the same line of business, which is often, identifies the firm's industry classification. ${ }^{14}$

With respect to the identified from the analysis, pertinent care should be made to distinguish between the cause and symptom of problem. ${ }^{15}$

[^5]Through the application of analytical tools, profitability and financial health of a concern is evaluated in a proper, legal and scientific manner. ${ }^{16}$

The analysis of transaction determines the solvency of business and the major efficiency of operation as compute to similar concerns. The analysis reveals how far the dreams and ambitions of the tough management have been converted into reality during each financial year. The analysis, being a technique of x-raying the financial position as well as progress of concern, it enables mangers and investors take decision that will affect the company's future.

Hence, much information can be attained about various aspects of a business through the analysis, which other ways would have been buried in amaze of details.

### 2.1.1.3.1. Objectives of financial Analysis:

From the concept of financial performance analysis, it has proved that one can explore various facts related to the past performance of business and predict out the future potentials for achieving expected results. Various parties are involved in the business directly of indirectly. Therefore, objective of the analysis also differs from one party to other. However, major objectives of the analysis, in broad sense, can be stated as follows ${ }^{17}$.
i. Assessment of past performance \& current position
ii. Assessment of potential \& related risks.

Past performance is often good indicator of future performance. Therefore, an investor for creditor is interested in the past sales, expenses, net income, cash flow and return in investment. In addition, an analysis of current position will tell what assets the business owns and what liabilities must be paid. Besides, it will provide the information about various facts in relation to the business such as:

Earning capacity of the profitability of the concern.

- Operational efficiency of the concern as a whole of it's various departments.
- Long term and short-term solvency of the business for the benefit of debenture holder's and trade credit.
- Real meaning and significance of financial data.

[^6]ii) Assessment of potential and related risks:

The part and present information are useful only to the extent that has been bearing on future decisions. Investor judges the potential earning capacity of a company because that will affect the value of the investment or share and the amount of dividend the company will pay. The creditors judge the potential debt paying ability of the company. The potential of the existing company are easier to predict than that of others. This means there is a less risk associated with them. The risk of the investment or loan hinges on how easy it is to predict the future profitability and liquidity. Besides, managers of the business concern will get various information about the potentials such as:

- Possibility of development in the near future through forecast and budget allocation.
- Financial stability of the business concern.
- Reforms needed for in the present policies and procedures that will help to reduce weaknesses and strengthen performance.


### 2.1.1.3.2. Significance of financial Analysis:

Significance of analysis lies on the objectives of financial analysis of any form. Different groups associated with the concern perceive the fact discovered by the analysis differently. The facts and the relationships concerning managerial performance, corporate efficiency financial strengths and weakness and credit worthiness are interpreted on the basis of analysis leads management of an enterprise to take crucial decisions regarding operation policies, investment value of the firm, internal financial control system and bargaining strategy for fund from external sources.

The parties that are benefited by the results or conclusions drawn from the analysis of financial performance can be enumerated as:

* Top management
* Creditors
* Shareholders
* Economists
* Labor unions

Top Management: It is the overall responsibility of top management to see that the resources of the firms are used most effectively and efficiently and that the firm's financial condition is sound, understanding the past is pre-requisite for anticipating the future. Hence, top management can measure the success. Otherwise a company's operations determine the relative efficiency of various departments, products and process, appraise the individual's performance and evaluate the system of internal audit.

Creditors: The creditors can find out the financial strengths and capacity of the borrower to meet their claims. Trade creditors are interested in the firms to meet their claims over a very short period of time. The suppliers of long-term solvency and survival. A leading bank through an analysis of their statements can decide whether the borrower retains the capacity of refunding the principle and paying interest in time or not.

Shareholders: The investors, who have invested their money in the firm's shares, are most concerned about the firm's earning. They are able to evaluate the efficiency of the management and determine if there is any need of change. In a large company, the shareholder's interest is to decide whether to buy, sell or hold the shares.

If performance of the organization is excellent, investors wish to buy the shares, where as they simply intend to hold the shares in case of satisfactory performance, But they are hurried to sell the shares in case of poor performance.

Economists: Economists analyze the financial statement with a view to study the prevailing business and economic condition, the government agencies analyze them for the purpose of price regulation, rate setting and similar other purposes.

Labor union: Well-motivated labors are good source of productivity. Labor unions are interested in right and benefits of labors to raise the moral of labors. To motivate the labors they expect to increase in wage, fringe benefit and so on. Therefore the union assess whether the company is in the situation or not to make facilities available.

### 2.1.1.3.3 Major steps on financial analysis:

The basis for financial analysis is financial information obtained from balance sheet and profit and loss account. The analysis of financial statements is completed in three major steps.
a) The first steps involve the reorganization and rearrangement if the entire financial date as contained in the financial statements. This calls for regrouping them into few principle elements according to their resemblance and affinities. Thus, the balance sheet and income statement are completely recast and presented in the condensed from entirely different from their original shape.
b) The next step is the establishment of the significant relationship between the individual components of balance sheet and profit and loss account. This is done through the application of tools of financial analysis.
c) Ultimately, significance of result obtained by means of financial tools is evaluated. This requires establishment of standard against which actual be compared.

### 2.1.1.3.4. Types of financial analysis:

The nature of financial analysis differs depending on the purpose of financial analysis and differs depending on the purpose of analyst. Financial statement analysis can be categorized into different types on the basis of material used, objectives of the analysis. ${ }^{18}$
a) On the basis of material used:

On the basis of material available and used by analyst, financial analysis can either be external or internal. Persons who don't have access to the detailed records of the company make an external analysis. They have to depend almost entirely in published financial statements. Investors, credit agencies, government agencies and research scholars make such type of analysis. Those persons who have access to the books of accounts and other related information to the business make an internal analysis. While conduction this analysis, the analyst is a part of enterprise. For example, analysis for managerial purpose is the internal type of analysis.
b) On the basis of objective:

On the ground of objective or purpose of study, financial analysis can either be long term or short term. Long-term analysis is made to study the financial stability, solvency and liquidity as well as profitability and earning capacity of a business concern. This analysis helps for long tem financial planning, which is essential for continued success of a business. Short-term analysis is made to determine the shortterm solvency, stability and liquidity as well as earning capacity of the business concern. This analysis helps for short term financial planning, which is essential for continuation of success of the business.
c) On the basis of modulus operandi analysis:

On the basis of modulus operandi, it cha either be horizontal or vertical. Horizontal analysis is conducted to review and analyze financial statements of a number of years and therefore, it is based on data taken from several years. Hence it is also known as dynamic analysis. Vertical analysis is conducted to review and analyze

[^7]the financial statement of one particular year only. As it is based on data from one year it is also called static analysis.

### 2.1.1.3.5. Techniques of Financial Analysis:

To evaluate the financial condition and performance of a company, the financial analyst needs certain yardsticks. The yardstick frequently used is a ratio or index relating two pieces of financial data to each other. Analysis and interpretation of various financial data would give experienced and skilled analyst a better understanding of the financial condition and performance of the firm, than they will obtain from analysis of the financial data alone. ${ }^{19}$

The technique of analysis are employed to ascertain or measure the relationship among the financial statement items of a single set of statement and changes that have taken place in these items as reflected in successive financial statement. The fundamental of the analytical technique is to simplify or reduce the date under review to the understandable terms. Out of the various techniques, selection to a technique or combination of the techniques can be used for the analysis depending on the purpose and availability of the materials demanded by the technique.
a) Fund Flow Analysis:

The statements of change in financial position prepared to determine only the sources and uses of fund between two dates of balance sheets is known as funds flow statements. It is prepared to uncover the information that financial statements fail to describe clearly. It spells out the sources form which funds were derived and uses to which these funds were put.

This statement is prepared to summarize the change in assets and liabilities resulting form financial and investment transactions during the period as well as those chances occurred due to change in owners' equity. It is also aimed to depict the way in which he firm used its financial resources during the period.

Method of preparing funds flow statement depends essentially upon the sense in which the term fund is used. There are three concepts of und: Cash concept, Total resources concept and Working capital concept. According to cash concept, the word fund is synonymous with cash. Total resources concept represents the total assets and resources as fund. The term fund refers only to working capital on working capital concept.

However, the concept of fund as working capital has gained wide acceptance as source of fund while conduction funds flow analysis. Transaction that decreases working capital is treated as application. But any transaction tat affects current

[^8]liabilities or current assets without resulting any change in working capital is not taken as source or use.

The utility of this technique stems from the fact that it enables shareholders, creditors and other interested persons to evaluate the use of funds. It also enables them to determine how these uses were financed. In the light information's so supplied by statement, the outsider can decide whether or not to invest in the use of enterprise.

It enables finance manager to detect the imbalances in the use of funds and undertake remedial actions. It serves as control device to measure the deviation between actual use of fund and the estimated budget. Analysts can evaluate the financial pattern of the concern (what portion of the growth was financed internally and what portion externally). In spite of the great significance of funds flow analysis to various parties associated with the business, it is not free from drawbacks. Its shortcoming can be listed:

- This is not full proof as it depends on conventional financial statements.
- It cannot introduce any new items, which causes changes in financial status of the business.
- It is not much relevant technique as study of change in cash position is more useful rather than fund position.
- It is historical in nature so cannot estimate source and application of fund in near future.
- It does not reflect the structural and policy changes.
b) Cash Flow Analysis:

This statement is prepared to know clearly the various items of inflow and outflow of cash. Cash flow analysis is deferent form funds flow analysis in the sense, the analysis relates to the movement cash rather than the inflow and outflow of working capital. It summarizes the causes of change in cash position between dates of two balance sheets. While preparing cash flow statement, only cash receipts from debtor against credit dates are recognized as the source of cash. Similarly, cash purchases and cash payment to suppliers for credit purpose is regarded as the use of cash. The same holds true foe expenses and incomes outstanding and prepaid expenses are not to be considered under this analysis.

This type of analysis is useful short-running planning of the firm. The firm needs sufficient cash to pay debt maturing in near future, to pay interest and other expenses and to pay dividend to shareholders. The projection of cash flow for near future can be made to determine the availability of cash. This cash balance cash balance can be matched with the firm's need for cash during the period and accordingly, arrangement can be made to meet the deficit or invest the surplus cash temporarily.

Though it is more confidential than funds flow analysis for the decision related to the near future, it is also not free from drawbacks. Its drawbacks can be listed as:

- It is not perfect evident as it depends on conventional statements.
- It is historical in nature.
- It does not reflect structural and policy changes.
c) Trend Analysis:

This method is immensely helpful in making comparative study of financial statement of several years. This method of analysis involves the computation of percentage relationship that each statement item bears to the same item in the base year. Base year for the comparison may be earliest year, the latest year for any intervening year under the study. This exhibits the direction to which the concern is preceding.

Trend analysis reveals weather the current financial position of the company has improved over the past years or not. It shows which of the items have moved in a favorable direction and which of them in unfavorable direction. Though it is the important fool of analysis, it is bound by limitation. They are:

- Trend for a single balance sheet or income statement is seldom very informative.
- It does not give accurate result if accounting principles followed by the accountants is not consistent over the period of study.
- Price level change adversely affects the comparison.
- Selected base year for some of the items in the statements may not be typical.
d) Ratio Analysis:

Ratio analysis is carried out to develop meaningful relationship between individual items or group of item usually shown in the periodical financial statements. An accounting ratio shows the relationship between the two interrelated accounting figures. Ratios are guides of shortcuts that are useful in evaluating the financial position and operation of a company. When the relationship between two figures in the balance sheet is established. Ratio may be expressed in the form of quotient, percentage or proportion. Ratio analysis involves two types of comparisons for the useful interpretation of the financial statement. A ratio itself does not indicate the favorable or unfavorable position. Most commonly used standards to evaluate the ratio are:

- Comparison of present ratio with past expected future ratios.
- Comparison of the ratio the firm with these similar firms over the period of time or with industry average at the same point of time.

With the help of ratio, one can judge financial performance of a business concern over a period of time and against the industry average. The ratio helps the analyst to form the judgment whether the performance of the firm is good, questionable or poor. Management of the firm can take strategic decisions on the basis of position revealed by ratio. Investors can decide about the future of their investment. Creditors judge whether the firm is able to meet its obligations and whether the more leading would be beneficial for them or not.

Liquidity ratio measures the ability of the firm to meet its current obligations. Leverage ratio evaluates the long-term financial position of the firm. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. Finally, profitability ratios are calculated to measure the operating efficiency of the company. Through ratio analysis is powerful technique of financial analysis; it should be used with extreme care and considered judgment because it suffers from certain drawbacks. The drawbacks of the ratio analysis are listed below.

- It is difficult to decide the proper basis of comparison.
- It calls interpretation to certain aspects of the business which needs detailed investigation before arriving any financial conclusion.
- Unless there is a consistency in adoption of accounting methods, ratios may not prove of greater use in case of inter firm comparison.
- The price level changes make the interpretation of ratios invalid.
- The ratios are generally calculated from past financial statements and thus, are no indicators of future.
e) Statistical techniques for financial analysis:

Mean: Mean of a set of observations is their sum divided by the number of observations.

Standard deviation: It is positive square root of the arithmetic mean of the squares of the deviations of the given values forms their arithmetic mean.

Co-efficient of variations: The coefficient of variation is the relative measure of dispersion, comparable across distribution. This is defined as the ratio of the standard deviation to the mean expressed in percent.

Correlation: Correlation analysis ids defined as the statistical techniques, which measures the degree of relationship (or association) between variables, In other words, it helps us in studying the covariance of two or more variables.

Karl Pearson's correlation coefficient is also known a Pearson's coefficient of correlation. It is the mathematical method for measuring the degree of association between the two variables, say $S$ and $Y$.

Regression: The relationship between a known variable and unknown variable to estimate the unknown one is termed as Regression Analysis. Thus correlation measures the degree of relationship between variables while regression analysis shows how the variables are related.

Regression \& correlation analysis thus determines the nature and the strength of relationship between two variables. The regression is the estimation of unknown values or prediction of one variable from known values of other variables.

## Testing of Hypothesis

Hypothesis is usually considered as the principal instrument in research. It can also be considered as a suggested solution of the research problems. Its main function is to suggest new experiments and observations. With the available data, decision makers applied the hypothesis testing and give the decision accordingly. It may not be proved absolutely but in practice it is accepted if it has withstood a critical testing. Usually the statistical hypothesis is tested at $1 \%, 5 \%$ and $10 \%$ level of significance. Thus, the significant test will be conducted in the analysis of the data.

T- test (student's t - test): when the sample sizes are equal, i.e. $\mathrm{n}_{1}=\mathrm{n}_{2}=\mathrm{n}$ (say), and (ii) the tow samples are not independent but the sample observations are paired together, i.e. the pair of observations $\left(\mathrm{x}_{i}, \mathrm{y}_{i}\right),(\mathrm{i}=1,2, \ldots ., \mathrm{n})$ corresponds to the same $\left(i^{\text {th }}\right)$ sample unit the problem is to test if the sample means differ significantly of not.

F- test : If two independent samples $\mathrm{x}_{1},\left(i=1,2 \ldots, \mathrm{n}_{1}\right)$ and $\mathrm{y}_{j},\left(j=1,2, \ldots \ldots, \mathrm{n}_{2}\right)$ have been drawn form normal populations with the same variance $ð^{2}$, (say), or whether the two independent estimates of the population variance are homogeneous or not.

Z- test: To the significance of an observation sample correlation coefficient from un correlated varieties normal population, $t$ - test is used. But in random sample of size $\mathrm{n}_{i}$ from a distribution of ' r ' is by no means normal and in the neighborhood of $\mathrm{p}= \pm 1$, its probability curve is extremely skewed even for large n. if $\mathrm{p} \neq 0$, Fisher suggested the following transformation.

Analysis of variance (ANOVA): In order to test whether all the means of different groups of sample have same common mean or not, analysis of variance is carried out. With this test one can make an inference whether the difference between the sample means is merely due to sample fluctuation or they are significantly difference. The technique use in analysis of variance which compares the betweengroup variance to the variance is F - ratio.

### 2.1.1.3.6. Financial Performance Analysis of Bank.

Traditionally, Banks Act as financing intermediary to channel funds form excess fund generating with to deficit units, Unlike other non Bank financial companies, commercial Banks do not produce any physical goods they produce loans and financial innovation to facilitate trade and industries. Because of special role they play in the economy, concerned authorities needs to regulate them. Analysis of financial statement of bank is different form that of other companies due to the special nature of assets and liabilities.

Balance sheet, profit and loss account and accompanying notes are the most widely used financial statements of the banks. The banks balance sheet is composed of financial claims as liabilities in form of deposit and as assets in the form of loans fixed assets. Financial innovations, which are generally contingent in nature, are considered as off balance sheet items. Interest received on loans and advance and investment and paid on deposit liabilities are major components of profit and loss account. The other sources of income fee commission, discount, services changes etc.

The users of financial statement of bank need relevant, reliable and comparative information to evaluate the financial performance and position and hence make economic decision.

Following factor's affecting the evaluations of Bank's overall performance.

- The structure of balance sheet and profit and loss account.
- Operating efficiency and internal management system.
- Management decision taken by the top management regarding interest rate, lending polices, exchange rates etc.
- Environment changes such as change in technology, government, competition, economy etc.


### 2.1.2 Review of Literature

Review of literature begins with the conceptualizations of persisting theories and search of research studies in this topic. It deals with the existing volumes/situations of selected or similar topics. It eliminated the duplication of the topics. As far possible review of literatures consist the past information, existing situation and the proposed
research. It is quit difficult to review a new topic; however a research should follow the following points while reviewing the literature.

To provide frontiers (boundaries) of the selected topic.
To understand the tools and design used.
To avoid the replication of the topic.
To Integrate the significance of the research in a precise manner.
To choose adequate procedures of sealing and measurement.

### 2.1.3 Review of pilot study:

The researcher has found various studies conduct in the field of financial performance of joint venture bank. Although the same topic has been found in the literature review, the thesis has prepaid in the same topic with considering the latest and new style and different than those. However different pilot studies have been reviewed so that the chance of duplication will be avoided from the present study and some new and change can be created for achieving the objectives.

Nagendra Bahadur Amatya in his thesis entitled 'an appraisal of financial position of Nepal Bank limited- unpublished MD Thesis- TU 1995' concludes the bank is in a better position liquidity management. The bank has been successful in mobilizing deposit from the very beginning. The total deposit of the Banks on average increases by 17.9 per end during the period 1980/81 to 1989/90. Trade and commercial advance have been playing major role in the credit composition of the bank.

Trough the reserve of the bank has been increasing gradually. The reserve plays a nominal role in the credit expansion control. The volume of transaction is high in all respect but the bank doesn't show satisfactory profit, it shows decreasing trend of profits. ${ }^{20}$

A study under taken by Vikram Chandra Gurung entitle, 'A financial study of joint venture Banks in Nepal: A comparative study of Nepal Grind lays Bank Limited and Nepal Indosuez Bank Limited an unpublished master degree's TU 1995' concluded that the liquidity position of Indosuez Bank that below normal standard current ratio of 2.1 indicates unsatisfactory position the bank is efficient utilizing most of its assets

[^9]profitability of the bank has assumed an increasing trend but yet to be fully satisfaction. The capital structure of the bank is extremely leveraged. The bank has maintaining sound capital adequacy ratio as directly by the central bank. ${ }^{21}$

A study under taken by Blaram Poudel entitled, 'A comparative financial performance analysis of Nepal SBI Bank Ltd and Nepal Grind lays Bank Ltd’ an unpublished master degree's thesis and he has concluded that the profitability position and tried to find out the strength and weakness and opportunity and tried to find out reason of changes on profitability and liquidity trend of the both banks. ${ }^{22}$

This study was concluded by Keshab Raj Joshi, with the main objectives of evaluating the financial performance of commercial bank and to highlights on their activities. He had concluded that the commercial bank had maintained a sound liquidity position. These band followed conservative credit policy so their investment on loans and advance was very low though the main source of income was interest from the loans and advance.

The debt equity ratios of there banks were very high which was threatening for their long term solvency. These banks had low profit margins but satisfactory return on net worth. Period, the research had recommended to these bans for adopting sound cash forecasting and budgetary policy and liberal policy to grant loans and advances. ${ }^{23}$

Ganandra Achary's study entitled, 'A comparative study of financial performance of Joint venture Banks in Nepal especially on the Nepal Arab Bank Ltd and Nepal Indosuez Bank Ltd' the liquidity position of both the banks was below the standard of $2: 1$ (i.e. unsatisfactory comparatively that ratio of NIBL was better on an average both the banks are found to be efficient in utilizing their total assets. Capital structure was highly leveraged capital adequacy ratio of NIBL was better than that of NABIL and the profitability position of both the banks was not recorded as satisfactory.

Based on the findings of analysis, the research suggested finding out the root cause of weak liquidity position to improve the liquidity of both banks. Similarly both the banks are suggested to maintain improved capital structure by increasing equity base, to extend loan and advance to utilize more portion of total deposits, to minimize

[^10]operational expenses to mobilize resource more efficiently and to extend their banking facilities even in the rural areas. ${ }^{24}$

A comparative study of financial performance of Nepal SBI Bank Ltd and Everest Bank Ltd, thesis of MBA 2001 by Shreedhar Adhikari was made to find out the liquidity position of the both bank. Overall liquidity position of EBL was found slightly strong than that of NSBIBL.

It showed that EBL can meet its current liabilities more efficiently than NSBIBL and concluded that both the bank has used higher proportion of debt in their capital structure and was also found that the overall capital structure of NSBIBL appears more levered than the EBL. And has suggested that both the banks have maintained NRB balance sheet to deposit ratio remarkable higher than the standard prescribed by NRB. ${ }^{25}$

Another study by SP Ramal evaluates the liquidity profitability, turnover, credit and capital adequacy position of NBBL and NSBIBL. The study has made an effort to find out the future trends of net profits, total deposit, total credit and investment of those particular JVB. ${ }^{26}$

A study conducted by Rista Jha was concerned about the growth objectives, function, and role of the commercial joint venture banks and has examined the comparative strength and weakness of four JVBs. He has studied the operational aspects of there JVBs taking into account the products study offers. ${ }^{27}$

[^11]
## CHAPTER-III

## RESEARCH METHODOLOGY

## 1. INTRODUCTION

A research is an intensively powerful search for knowledge and understanding of social and physical phenomena. Research is a systematic inquiry or examination made to discover new function or relations and to expand, verity existing knowledge whether in academic (theoretical) or applied sector.

As mentioned earlier, it is a systemic enquiry it needs to be properly designed before beginning the research. Such preparation of research design or plan helps to carry out the research work smoothly. Research design consists of statement of the problem, methodology, population and sample, gathering of data analysis and interpretation of data and format of research report. A research design is a plan, structure and strategy of investigation, conceived so as to answer the research questions and to control the variance. It covers the following aspects.

1. How to collect the data.
2. How to setup the hypothesis.
3. Which statistical tools to be used.
4. How to interpret the findings of the research.

Evaluating financial performance of major two Joint Venture Banks (Nepal SBI Bank and Nepal investment Bank Ltd) in a micro level and to highlight the effects of the financial decisions of these banks in the economy at the macro level forms the basic objective of this research. This chapter will outline the methods followed in the process of analyzing the financial performance of two Joint Venture Banks.

The following are the details of research methodology used in the analysis:

### 3.1. RESEARCH DESIGN.

Keeping in the mind the objectives of the study, descriptive cum analytical research design will be followed. The study is based on the wide range of variables and factors influencing financial decision of the Joint Venture Banks. Comparative data of Joint Venture Banks are presented in such a way, so as to make the research informative to the readers.

### 3.2. SOURCES OF DATA.

Secondary data are used for the purpose of the study. They are collected from official publication of the banks.

- Annual reports to shareholders by NSBIBL.
- Annual reports to shareholders by NIBL.
- Previous related research and dissertations.
- Books, magazines, newspaper and journals.

Other than the above-mentioned sources, the information collected through verbal communications with the staffs of related banks has been used in the research.

### 3.3. POPULATION AND SAMPLE.

As all listed six Joint Venture Banks constitute the population of this study. Among of them, two joint Venture Banks named NSBIBL and NIBL are selected as the sample banks for the purpose of this study. The sample size of those Joint Venture Banks represented around $2 / 6=22 \%$ of the total population.

### 3.4. DATA COLLECTION PROCEDURES.

The data used in this study were prepared for the sole purpose of sample banks, conserved personnel, Nepal Rasta Bank and other bulletins. Similarly, researcher visited TU, Centre library (Kirtipur), Library of central department TU, Library of Nepal Commerce Campus (Minbhawan), Library of postgraduate college at Biratnagar and other public libraries.

### 3.5. METHOD OF ANALYSIS.

Purpose of this study is the different data obtained from various sources are arranged and tabulated. Using various financial and statistical analytical tools makes analysis of tabulated data. Such analytical tools are presented as under.

### 3.5.1. Financial Tools:

This study is related to financial performance analysis. So financial tools are more useful. They help to identify the financial strengths and weaknesses of the firm. In spite of various financial tools available, the research has primarily stressed on ratio
analysis assuming it as the most suitable tool. A ratio is a number expressed in terms of other number and it expresses quantitative relation between any two variable. ${ }^{28}$

Moreover, it is used as technique to quantify the relationship between two sets of financial data taken form either profit and loss account or balance sheet. It provides information relation to strengths and weakness of financial data in relation to others. ${ }^{29}$

Ratio can be calculated between any tow items of financial statements. It means there may be as many ratios as there is the number of items. But under their ratio analysis technique it is not practical to work out all the ratios. Hence only the required ratios have been worked out. ${ }^{30}$

The calculated ratios have been grouped into following headings.

### 3.5.1.1. Liquidity Ratios:

Liquidity is measured by the speed with which a bank's assets can be converted into cash to meet deposit withdrawals and other current obligations. A bank is subject to a minimum cash reserve requirement (CRR) imposed by central bank to ensure that a minimum amount of total assets to meet unexpected withdrawals.

The following ratios are evaluated under liquidity ratios.
(a) Current Ratio:

The ratio is calculated by dividing current assets by current liabilities.
= Current assets/Current liabilities
Current assets include dash and those assets, which can be converted into cash within a year. These include cash and bank balance, investment in government securities, loan and advances, money at call and short notice, bills for collection, interest receivables etc. All obligations maturing within a year are included in current liabilities. These consists of current saving and short term deposits, fixed deposits maturing in tat year, borrowings, accrued expenses, bills for collection, dividend payable, customer acceptances etc.
(b) Cash and bank balance to current \& saving deposits ratio:

[^12]This ratio is calculated by dividing cash and bank balance by current and saving deposit.
=Cash and bank balance/Current \& saving deposits
Cash and bank balance comprise cash in hand, foreign cash in hand cheque and other cash items, balance with domestic banks and balance held in foreign banks. Current and saving deposits consists all types of deposits excluding fixed deposits.

The ratio measures the ability of bank to meet its immediate obligations. The bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposits. High ratio indicated sound liquidity position of the bank. However, too high ratio is not good enough as it reveals the under utilization of funds.
(c) Cash and bank balance to total deposit ratios:

This ratio is calculated by dividing cash and bank balance by total deposit.
$=$ Cash and bank balance/Total deposit
Total deposit consists of current deposit, saving deposit, fixed deposit, money at call and short notice and other deposits. The ratio shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank. But too high ratio is not favorable for the bank because it produces adverse effect in profitability due to idleness of high interest bearing fund.
(d) Fixed deposits to total deposit ratio:

Dividing fixed deposit by total deposit, this ratio can be determined.
=Fixed deposits/ Total deposit
The ratio shows what percentage of total deposit has been collected in form of fixed deposit. High ratio indicates better opportunity available to the bank to invest in sufficient profit generating long-term loans. Low ratio means the bank should investment the fund of law cost in short term loans.
(e) NRB balance to current and saving deposit ratio:

The ratio is computed by dividing the balance held with Nepal Rastra Bank by saving deposits.
=NRB balance/ Current and saving deposit

Commercial banks are required to hold certain portion of current and saving deposits in Nepal Rastra Bank's account. It is to ensure smooth functioning and sound liquidity position of the bank.

As per the directive of Nepal Rastra Bank, the required ratio is 8 Percentage, therefore, the ratio measures whether the bank is following the direction of NRB of not.
(f) NRB balance to fixed deposit ratio:

The ratio is computed by dividing the balance held with Nepal Rastra Bank by fixed deposits accepted.
=NRB balance/ Fixed deposit
It shows the percentage of amount deposited by the bank in Nepal Rastra Bank as compared to the fixed deposits. According to the direction of NRB, the ratio should be maintained 6 percentages. Hence the ratio so calculated finds whether the bank has obeyed the direction of NRB or not.

### 3.5.1.2. Leverage Ratios:

The long-term financial position of the firm is judged by the leverage of capital structure ratios. The leverage ratios are calculated to measure the financial risk and the firm's ability or using debt or the benefit of the shareholder. These ratios measure the proportion of outsides fund and owner's capital used in the banks. The following ratios are used under this group:
(a) Total debt to equity ratio:

The ratio is calculated by dividing total debt by shareholder's equity.
$=$ Total debt/ Shareholder's equity
The total debt consists of all interest bearing long term and short-term debts. These include loans and advances taken form other financial institutions, deposits carrying interest etc. Shareholders equity includes paid up capital, reserves and surplus and undistributed profit.

The ratio shows the mix of debt and equity in capital. It measures creditors claim against owner. A high ratio shows that the creditor claims are greater than those of owners. Such a situation introduces inflexibility in the firm/s operation due to the increasing interference and pressures form creditors. Low ratio implies a greater claim of owners than creditors. In such a situation shareholders are less benefited if economic activities are good enough. Therefore, the ratio should neither be too high nor too law.
(b) Total debt to total assets ratio:
=Total debt/ Total assets
This ratio shows the contribution of creditors in financing the assets of the bank. High ratio indicates that the greater portion of the bank's assets been financed through the outsider's fund. The ratio should be neither too high nor too law.
(c) Debt to total capital ratio:

The ratio is obtained by dividing total debt by total capital of the firm.
$=$ Total debt/ Total capital
Total capital refers to the sum of interest bearing debt and net shareholders equity. It shows the proportion of debt in total capital employed by the bank. High ratio indicated greater claim of creditor's. On the contrary, low ratio is the indication of lesser claim of outsiders. For the sound solvency position the ratio should not be too high or too low.
(d) Interest coverage ratio:

The ratio is calculated by dividing net profit before deduction if interest and tax by interest charges.
$=$ NPBIT/Interest charges
The ratio is also known as times interest earned ratio is used to test the debt servicing capacity of the bank. It shows the numbers of times the interest charge are covered by funds that are ordinarily available for the payment. It indicates the extent to which the earning may fall with out causing any embarrassment of the regarding the payment of interest. Higher ratio is desirable, but too high ratio indicates the firm is very conservative in using debt. A lower ratio indicates excessive use of debt of insufficient operation. ${ }^{31}$

### 3.5.1.3. Capital adequacy ratios:

Capital adequacy ratio measures whether the firm has maintained sufficient capital or not. In other words, it helps to decide whether the existing capital is adequate

[^13]or there is not need of reforms. The ratio is tested to ensure the safety and stability of the firm in long run.

Over capitalization and under capitalization both have adverse effect on profitability of the forms capital is insufficient, the form may mot be able to group the opportunity from potential profitable sectors. Therefore, the commercial banks have been directed to retain sufficient ratio by the central bank. As per the directive, the ratio should be $85 \%$ of their total risk weighted assets and total of balance sheet transitions. Here, capital fund refers to the core capital and supplementary capital. Commercial banks cannot declare and distribute dividend until they meet capital adequacy ratio.

Under this group, following ratios are tested:
(a) Net worth of total deposit ratio:

The ratio is calculated by dividing net worth by total deposits:
=Net worth/Total deposit
The ratio measures the percentage of net worth in relation to the total deposits collected in the bank. The ratio is a yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank.
(b) Net worth to total assets ratio:

The ratio is calculated by dividing the net worth by total assets of the bank.
=Net worth/ Total assets

Net worth includes share capital and shareholder's reserves. It means the relative proportion of the shareholders fund with respect to the credit. High ratio shows that the firm has adequate capital, which is the index of safety. Moreover, a bank with higher ratio is less affected by the instability of the financial market.
(c) Net worth to capital ratio:

The ratio is calculated by dividing the net worth by total capital of the bank.
=Net worth/ Total capital
It means the relatives proportion of net worth with respect to the total capital. High ratio shows that the firm has adequate capital, which is the index of safety. Moreover, bank with higher ratio is less affected by the instability of the financial market.

### 3.5.1.4. Turnover ratios:

Turnover ratios also known as utilization ratios are employed to evaluate the efficiently with which the firm manages and utilizes its assets. They measure how effectively the form uses the investments are made in order to produce profitable sales. Unlike other manufacturing concerns, the bank produces loans, advances and other innovation. So it sells the same.

High ratio depicts the managerial efficiently in utilizing the resources. They shoe the sound profitability position of the bank. Low ratio is the result of insufficient utilization of recourses.

However, too high ratio is also not good enough as it may be due to the insufficient liquidity. Depending upon special nature of assets and sales made by the bank, following are tested:
(a) Loans and advances to total deposits ratio:

This ratio is calculated by dividing loan and advances by total deposits. This is stated as:
=Loan and advances/ Total deposits
Loans and advance consists of loans, advances, cash credit, overdrafts and foreign bills purchased and discounted. The ratio indicates the proportion of total deposits invested in loans and advances.

High ratio means the greater use of deposit for investing in loans and advances. But very high ratio shows poor liquidity position and risk in loans. On the contrary, too low ratio may be the cause of idle cash or use of fund in loess productive sector.
(b) Loan and advances to fixed deposit ratio:

The ratio is calculated by dividing loans and advances by fixed deposit liabilities.
= Loan and advances/Fixed deposits
The ratio indicates what proportion of fixed deposit has been used for loans and advances. Since fixed deposits carry high rate of interest, funds so collected need to be invested in such sectors which yield at least sufficient return to meet the obligation. High ratio means utilization of the fixed deposit in form of loans.
(c) Loan and advances to saving deposit ratio:

The ratio is calculated using following formula
$=$ Loan and advances/Saving deposits
The ratio measures what extent of saving deposit has been turned over to loans and advances. Saving deposit also, being an interest bearing liability, needs to be invested productive sector. High ratio indicates greater utilization of the saving deposits in advancing loans.
(d) Investment to total deposit ratio:

This ratio is calculated by dividing investment by total deposit.
=Investment/ Total deposits
Investment comprises investment its HMG treasury bills, development bonds, company, shares and other type of investment. The ratio shows how efficiently the major resources of the bank have been mobilized. High ratio indicated managerial efficiency regarding the utilization of deposits. Law ratio is the result of less efficiency in use of funds.

### 3.5.1.5. Profitability ratios:

Profitability is a measure of efficiency and the search for it provides and incentive to achieve efficiency. Profitability also indicates public acceptance to the product and shows that the firm can produce competitively. Moreover, profits provide the money for repaying the debt incurred to finance the project and the resource for the internal financing expansion. The profitability of a firm can be measured by its profitability ratios. ${ }^{32}$

Here, Profitability ratios can be determined on the basis of investment. The following are the major profitability ratios used in this study.
(a) Return on total assets ratio:

This ratio is computed by dividing net profit after tax by total assets.
= Net profit/ Total assets
Net profit refers to the profit after deduction of interest and tax. Total assets mean the assets that appear in assets right side of balance sheet. It measures the

[^14]sufficiency of bank in utilization of the overall assets. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank.
(b) Return on net worth ratio:

The ratio is obtained by dividing total net profit by net worth.
$=$ Net profit/ Net worth
This ratio is tested to see the profitability of the owner's investment. It reflects the extent to which the objective of business is accomplished. The ratio is of great interest to present as well as prospective shareholders and also of great significance to management, which has the responsibility of maximizing the owner's welfare.
(c) Return on total deposit ratio:

The ratio is computed by dividing net profit after tax by total deposit:
$=$ Net profit after tax/Total deposit
The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio is the index of strong profitability position.
(d) Total interest expenses to total Interest income ratio:

The ratio is obtained by dividing total interest expenses by total interest income.
$=$ Total interest expenses/Total interest income
Total interest expenses consist of interest expenses incurred for deposits, borrowing and loan taken by the bank. Total interest income includes interest income received from loans and advances, cash credit overdrafts, government securities, inter bank loans and other investments. The ratio shows the percentage of interest expenses incurred in relation to the interest income realized. Lower ratio is favorable from profitability point of view.
(e) Interest earned to total assets ratio:

The ratio is calculated by dividing interest income by total asset of the bank. =Interest earned/Total assets

The ratio shows the percentage of interest income as compared to the assets of the bank. High ratio indicates the proper utilization of bank's assets for income generation purpose. Law ratio represents unsatisfactory performance.
(f) Staff expenses to total income ratio:

The ratio is obtained by dividing the staff expenses by total income.
=Staff expenses/Total income

Staff expenses includes the salary and allowances, contribution to the provident fund and gratuity fund, staff training expenses and other allowances and made for staff. The ratio measures the proportion of income spent for the staff, whose contribution is of great significance in the success of the bank. High ratio indicates that the major portion of income is used for staff. From the firm's point of view, law ratio is advantageous. But the staff prefer high ratio, as it is the result of higher level of facilitated and benefits provided to them.
(g) Office operation expenses to total income ratio:

The ratio is obtained by dividing office operation expenses by total income.
=Office operation expenses/ Total income
Office operation expenses comprise expenses incurred in house rent, water and electricity, repairs and maintenance, legal expenses, audit expenses and other miscellaneous expenses made in course of operation.

It shows the percentage of income spent for the operating activity of the bank. High ratio shows that large amount of income is spent for the operation activity of the bank. Lower ratio is favorable to the bank, as it is the reflection of operational efficiency.

### 3.5.1.6. Other financial indicators:

Above stated ratios throw light on various aspects of bank. Management, investors and creditors can get information regarding their interest. Some indicators are dealt here which provide more knowledge about the performance of the bank. They are listed below:
(a) Earning per share:

It is obtained by dividing earning available to common shareholders by number of equity shares outstanding.
$=$ Earning available to common shareholders/Number of equity shares outstanding

Earning per share refers to the income available to the common shareholders on per share basis. It enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favor high EPS. It reflects the sound profitability position of the bank.
(b) Dividend per share:

It is obtained by dividing earning paid to shareholders by number of equity shares outstanding.
=Earning paid to common shareholders/Number of equity shares outstanding
The net profit after the deduction of preference dividend belongs to equity shareholders. But the income that they rally receive is the amount of earning distributed as dividend. Dividend may distribute in form of cash or bonus share. Dividend distribution affects the price of share. The shareholders prefer high dividend. But it may sometimes be wise to distribute less amount of profit if investment opportunities are available.
(c) Price-earning ratio:

It is obtained by dividing market value per share by earning per share.
$=$ Market value per share/Earning per share
$\mathrm{P} / \mathrm{E}$ ratio is widely used to evaluate the bank's performance as expected by investors. It represents the investors, judgment or expectation about the growth in the bank's earning. In other words, it measures how the market is responding towards the earning performance of the concerned institution. High ratio indicates greater expectation of her market towards the achievements to the firm.

### 3.5.2. Statistical tools.

### 3.5.2.1. Arithmetic Mean (X)

An average is a single value selected from a group of values to represent them in same way, which is supposed to stand for a whole group of which is a part, as typical of all the valued in the group (Waugh A.E.).

Out of various measures of the central tendency, arithmetic mean is one of the useful tools applicable here. It is easy to calculate and understand and based on all observations. Arithmetic Mean of a given set of observations is there sum divided by the number of observations in general, $\mathrm{x}_{1}, \mathrm{x}_{2}, \mathrm{x}_{3}, \ldots \ldots \mathrm{x}_{n}$ are the given n observations, then their arithmetic mean, usually denoted by $\bar{x}$ is given by:
$\operatorname{Mean}(\bar{X})=\frac{x_{1}+x_{2}+x_{3}+\ldots \ldots .+x_{n}}{N} \quad$ or,
$\operatorname{Mean}(\bar{X}): \frac{\sum X}{N}$

Where,
$\mathrm{N}=$ No of observation.

### 3.5.2.2. The coefficient of variation (C.V.)

The coefficient of variation is the relative measure of dispersion, comparable across distribution. This is defined as the ratio of the standard deviation to the mean expressed in percent.
C.V. $=\frac{S . D}{\bar{X}} \times 100$

Where,
S.D. $=\sqrt{\frac{\sum x^{2}}{N}-\left(\frac{\sum x}{N}\right)^{2}}$ is the standard deviation of a set of $n$ observation.

### 3.5.2.3. Trend Analysis from least square method.

The Straight-line trend implies that irrespective of the seasonal and cyclical swings and irregular fluctuations, the trend values increases of decreases by a constant absolute amount ' $b$ ' per unit of time. Hence the linear trend values from a series in arithmetic progression, the common difference being ' $b$ ' the scope of the trend line. The straight line trend between the dependent variable $y$ and the independent variable $x$ (i.e., time) is represented by the equation:
$\mathrm{Y}_{c}=\mathrm{a}+\mathrm{bx}$

Where,
$\mathrm{y}_{c}=$ Estimated value of Y for any given valued o independent variable $\mathrm{x}>$
$\mathrm{a}=\mathrm{Y}$ - intercept or value of Y , when $\mathrm{x}=0$.
$b=$ slope of the trend line of amount of change in y per unit change in $x$.
To determine the straight-line trend $e$ have to determine the values of ' $a$ ' and ' $b$ '. The values of $a$ and $b$ is obtained by solving the following two normal equations:

When $\sum X=0$
$\mathrm{a}=\frac{\sum Y}{N}, \quad \mathrm{~b}=\frac{\sum X Y}{\sum X^{2}}$
Where,
$\mathrm{N}=$ the number of years for which the data are given.

### 3.5.2.4. Correlation Analysis.

Correlation analysis ids defined as the statistical techniques, which measures the degree of relationship (or association) between variables, In other words, it helps us in studying the covariance of two or more variables.

Karl Pearson's correlation coefficient is also known a Pearson's coefficient of correlation. It is the mathematical method for measuring the degree of association between the two variables, say S and Y. The formula for calculation Karl Pearson's coefficient of correlation (i.e.) is given by:
$\mathrm{r}=\frac{N \sum X Y-\sum X \sum Y}{\sqrt{N \sum X^{2}-\left(\sum X\right)^{2}}} \frac{}{\sqrt{N \sum Y^{2}-\left(\sum Y^{2}\right)}}$
Where,
$\mathrm{N}=$ Number of pairs of X and Y .
$\mathrm{X}=$ Loan and advances.
$\mathrm{Y}=$ Total deposits.
$\mathrm{r}=$ Correlation of coefficient.

## Probable Error and Coefficient of Correlation

Probable error of correlation is an old measure testing the reliably of an observed value of correlation coefficient. It is calculated to find the extend to which correlation coefficient is dependable as it depends upon the condition of random sampling probable error of correlation coefficient denoted by P.E.(r) is obtained as,
P.E. $(r)=0.6745 \times \frac{1-r^{2}}{\sqrt{N}}$

Where,
$\frac{1-r^{2}}{\sqrt{N}}$ Standard Error Reason for taking 0.7645 is that in a normal 1-r distribution $5 \%$ of observation lie in range p. +- $1,0.6745$ where i and o denotes the population mean and standard deviation.
P.E. (r) is used to test it and observed value of sample correlation coefficient is significant of any correlation in population.

If $r$ is less than its P.E. ( $\mathrm{r}<6 \mathrm{P} . \mathrm{E}$. ), it is not all significant.
If $r$ is more than its P.E. (r>6P.E.), there is correlation.
If $r$ is more than 6 times its P.E. and greater than +-0.5 , than it is considered coefficient.

### 3.5.2.5. Regression Analysis.

The relationship between a known variable and unknown variable to estimate the unknown one is termed as Regression Analysis. Thus correlation measures the degree of relationship between variables while regression shows how the variables are related.

Regression \& correlation analysis thus determines the nature and the strength of relationship between two variables. The regression is the estimation of unknown values or prediction of one variable from known values of other variables.

Multiple regression analysis is a logical extension of the simple linear regression analysis. In multiple regression analysis, instead of single independent variables, two or more independent variables are used to estimate the unknown values of a dependent variable. Thus a multiple regression equation of X 1 on $\mathrm{X} 2 \& \mathrm{X} 3$ is an equation for estimation a dependent variables X1 from two independent variables X2 \& X3.

The multiple regression equation of dependent variables X 1 on two independent variables X2 \& X3 is given by:

$$
\begin{aligned}
& \sum X 1=\mathrm{na} 1+\mathrm{b} 1 \sum X 2+\mathrm{b} 2 \sum X 3 \\
& \sum X 1 X 2=\mathrm{a} 1 \sum X 2+\mathrm{b} 1 \sum X 2^{2}+\mathrm{b} 2 \sum X 2 X 3
\end{aligned}
$$

$$
\sum X 1 X 3=\mathrm{a} 1 \sum X 3+\mathrm{b} 1 \sum X 2 X 3+\mathrm{b} 2 \sum X 3^{2}
$$

Where,
$\mathrm{X} 1=$ dependent variables $=$ Return on Equity $($ ROE $)$
$\mathrm{X} 2=$ independent variables $=$ Return on Assets $($ ROA $)$
X3 $=$ independent variables $=$ Equity Multiplier (EM)

### 3.5.2.6. Testing of Hypothesis.

Hypothesis is usually considered as the principal instrument in research. It can also be considered as a suggested solution of the research problems. Its main function is to suggest new experiments and observations. With the available data, decision makers applied the hypothesis testing and give the decision accordingly. It may not be proved absolutely but in practice it is accepted if it has withstood a critical testing. Usually the statistical hypothesis is tested at $1 \%, 5 \%$ and $10 \%$ level of significance. Thus, the significant test will be conducted in the analysis of the data.

T- test (student's t - test): when the sample sizes are equal, i.e. $\mathrm{n}_{1}=\mathrm{n}_{2}=\mathrm{n}$ (say), and (ii) the tow samples are not independent but the sample observations are paired together, i.e. the pair of observations $\left(\mathrm{x}_{i}, \mathrm{y}_{i}\right),(\mathrm{i}=1,2, \ldots \ldots, \mathrm{n})$ corresponds to the same ( $i$ th) sample unit the problem is to test if the sample means differ significantly of not.

$$
\mathrm{t}=\frac{\bar{x}-\bar{y}}{\sqrt{S^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}
$$

Where: $\quad S^{2}=\frac{1}{n_{1}+n_{2}-2}\left[\sum(x-\bar{x})^{2}+\sum(y-\bar{y})^{2}\right]$
F- test : If two independent samples $\mathrm{x}_{1},\left(i=1,2 \ldots, \mathrm{n}_{1}\right)$ and $\mathrm{y}_{j},\left(j=1,2, \ldots, \mathrm{n}_{2}\right)$ have been drawn form the normal populations with the same variance $ð^{2}$, (say), or (ii) whether the two independent estimates of the population variance are homogeneous or not.

$$
\mathrm{F}=\frac{s x^{2}}{s y^{2}}
$$

Where:

$$
\mathrm{Sx}^{2}=\left(\frac{n_{1}}{n_{1}-1}\right) \mathrm{sx}^{2}
$$

$$
\mathrm{Sy}^{2}=\left(\frac{n_{21}}{n_{2}-1}\right) \mathrm{sy}^{2}
$$

Z- test: To the significance of an observation sample correlation coefficient from un correlated bivariate normal population, $t$ - test is used. But in random sample of size $n_{i}$ from a distribution of ' $r$ ' is by no means normal and in the neighborhood of $\mathrm{p}= \pm 1$, its probability curve is extremely skewed even for large $n$. if $p \neq 0$, Fisher suggested the following transformation.

$$
\mathrm{Z}=\frac{1}{2} \log _{e} \frac{1+r}{1-r}=\tanh ^{-1} r
$$

Analysis of variance (ANOVA): In order to test whether all the means of different groups of sample have same common mean or not, analysis of variance is carried out. With this test one can make an inference whether the difference between the sample means is merely due to sample fluctuation or they are significantly difference. The technique use in analysis of variance which compares the betweengroup variance to the variance is F - ratio.
$F-$ ratio $=\frac{\text { Mean Sums of Square between Banks/d.f }}{\text { Mean Sums of Error }}$
Where:
Mean sums of Square between Banks $=\sum n_{j}(\bar{x}-\bar{x})^{2}$
Mean Sums of Error $=\quad \sum\left(\frac{n_{j}-1}{n_{t}-k}\right) s_{j}{ }^{2}$
$\mathrm{s}_{j}{ }^{2}=\frac{\sum(x-\bar{x})^{2}}{n-1}$
$\mathrm{n}_{j}=$ no. of d.f.
$\mathrm{n}_{t}=$ total no. of d.f
$\mathrm{k}=$ total no. banks.

## CHAPTER-IV

## PRESENTATION AND ANALYSIS OF DATA

In the previous section, we have already dealt about the introductory, background, function, objectives and limitation, significant, important of study and JVBs along with the reviewing of the relevant literature and also highlighted the research methodology of the study. Now in this section we are going to analyze and interpret the various financial variables in order to evaluate the financial performance to the joint venture banks selected for the study.

### 4.1 FINANCIAL RATIO ANALYSIS.

### 4.1.1 Liquidity Ratios:

Adequate liquidity is a must essential in the banking sector in order to protect solvency and to honor its short term obligation or liabilities. Failing to do so, banks might have to go into liquidation. To protect the creditor's interest, NRB has directed all the banks to maintain adequate CRR. In this section, current ratio, cash and bank balance to deposit ratios and NRB bank balance to total deposit ratio are calculated for the sampled JVBs selected for the study for the review period.

### 4.1.1.1. Current Ratio:

Current Assets include cash and those assets, which can be converted in to cash with in a year. These include cash and bank balance, investment in government securities, loans and advances, money at call and short notice, bills for collection, interest receivables. All obligations maturing with in a year are included in current liabilities. These consists of current, saving and short term deposits, fixed deposits maturing in that year, borrowings, accrued expenses, bills for collection, dividend payable, customers acceptances etc.

The ratio can be calculated by dividing current assets by current liabilities.
The comparative table shows that the current ratios of both banks have in fluctuating trend through out the study period. The mean ratios of current ratio of NIB is grater than of NSBIB, i.e. $37.56>31.79$ and the coefficient of variation of current ratios of NSBIB is greater than that of NIB i.e. $32.47>3.82$. It means that the variability of current ratio in NIB is more uniform than that of NSBIB.

## Current ratio

Table-4.1 ‘000’

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | C Asset | C.Lia | Ratio | C Asset | C.Lia | Ratio |
| $2059 / 60$ | 2671775 | 8375706 | 31.90 | 1333533 | 6930648 | 19.24 |
| $2060 / 61$ | 5399406 | 12526449 | 43.10 | 864426 | 7696591 | 11.23 |
| $2061 / 62$ | 5414670 | 14883370 | 36.38 | 846957 | 9186731 | 9.22 |
| $2062 / 63$ | 8008390 | 19914698 | 40.21 | 1333158 | 1389970 | 25.91 |
| $2063 / 64$ | 9310164 | 25712722 | 36.21 | 167269 | 716958 | 23.33 |
| Total | 187.81 |  |  | 158.93 |  |  |
| Mean | 37.56 |  | 31.79 |  |  |  |
| S.D. | 3.82 |  | 32.47 |  |  |  |
| C.V. | 10.17 |  | 102.18 |  |  |  |

Figure-4.1


The greater mean ratio of NIB reflects the high solvency position of the bank than NSBIB. However, both bank's ratio did not fall below $1: 1$ which shows that both the banks could not maintain the conventional standard of 2:1.

According to the trend in ratios of the commercial banks, the ratios below the normal standard may seen satisfy, but it denotes that-the banks have suffering from liquidity. So, the banks may loose their creditability because they may not able to pay
liabilities to the depositors at demand. The banks will have problem in winning the confidence of current depositors as well as short-term lenders.

## Calculation of $t$ - test of two banks of current assets and current liabilities:

Null Hypothesis, $H_{0}: Ц_{1}=Ц_{2}$, i.e., there is no significant difference between current ratios of NIB and NSBIB.

Alternative Hypothesis, $\mathrm{H}_{1}: \mathrm{L}_{1} \neq \mathrm{L}_{2}$, i.e., there is significant difference between current ratios of NIB and NSBIB.

| Bank | NIB |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Ratio | $\mathrm{x}-\bar{x}$ | $(x-\bar{x})^{2}$ | Ratio | $\mathrm{y}-\bar{y}$ | $(y-\bar{y})^{2}$ |
| $2059 / 60$ | 31.90 | 5.65 | 31.58 | 19.24 | 12.55 | 157.50 |
| $2060 / 61$ | 43.10 | -5.58 | 31.14 | 11.23 | 20.56 | 410.47 |
| $2061 / 62$ | 36.38 | -36.38 | 1323.50 | 9.22 | -9.22 | 85.01 |
| $2062 / 63$ | 40.1 | -40.1 | 1608.01 | 95.91 | -25.36 | 643.13 |
| $2063 / 64$ | 36.1 | -36.1 | 1303.21 | 23.36 | 8.43 | 71.06 |
| Total | 187.58 |  | 4297.44 | 158.96 |  | 1367.17 |
| Mean | 37.52 | - | - | 31.79 | - |  |

$$
\mathrm{t}=\frac{\bar{x}-\bar{y}}{\sqrt{S^{2}\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}
$$

Where:

$$
\mathrm{S}^{2}=\frac{1}{n_{1}+n_{2}-2}\left[\sum(x-\bar{x})^{2}+\sum(y-\bar{y})^{2}\right]
$$

After putting the values of this formula, we get:
$S^{2}=708.07$
$t=.420$

Tabulate $t_{0.05}$ for $(5+5-2)=8$ d.f is 2.31 .
Conclusion: Since calculated $/ t /$ is less than tabulated $t, \mathrm{H}_{0}$ accepted at $5 \%$ level of significance which means that two banks current ratios of NIB and NSBIB do not differ significantly. They are in similar pattern.

### 4.1.1.2. Cash and Bank Balance to Current and Saving Deposit Ratio:

Cash and bank balance comprise cash in hand, foreign cash in hand cheque and other cash items, balance with domestic banks and balance held in foreign banks. Current and saving deposits consists all types of deposits excluding fixed deposits.

The bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposits. High ratio in dicates sound liquidity position of the bank. However, too high ratio is not good enough as it reveals the under utilization of funds.

The ratio measures the ability of bank to meet its immediate obligations. Cash and bank balance to Current and saving deposit ratio.

Table-4.2
'000'

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | C.B.B | C.S.Dep | Ratio | C.B.B | C.S.Dep | Ratio |
| $2059 / 60$ | 926535 | 3414063 | 27.14 | 1333353 | 2933098 | 45.46 |
| $2060 / 61$ | 1226923 | 6386205 | 19.21 | 664426 | 3715696 | 17.88 |
| $2061 / 62$ | 2335521 | 8286543 | 28.18 | 72374 | 423344 | 17.10 |
| $2062 / 63$ | 2441514 | 9787647 | 24.94 | 1118158 | 4240936 | 26.37 |
| $2063 / 64$ | 9310164 | 12917360 | 72.07 | 1122690 | 5205122 | 21.57 |
| Total | 171.56 |  |  | 128.37 |  |  |
| Mean | 34.31 |  | 25.67 |  |  |  |
| S.D. | 19.14 |  | 10.42 |  |  |  |
| C.V. | 55.78 |  | 40.59 |  |  |  |

Figure- 4.2
'000'


The comparative table figure shows that cash and bank balance to current and saving deposits ratio of banks have in fluctuating trend through out from the study period.

The mean ratios of cash and bank balance to current and saving deposit ratio of NIB is greater than that of NSBIB, i.e. $34.31>25.67$ and coefficient of variation between ratios of NIB is greater than that of NSBIB i.e. 19.14>10.42. It means that the variability of ratios of NSBIB is more uniform than NIB.

The ratio means cash and bank balance to current and saving deposit of NIB indicates the sound liquidity position position of the bank than NSBIB. The ability of NSBIB to meet its immediate obligation is considerable more higher than NSBIB, which reveals that the bank has maintained adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposit.

### 4.1.1.3. Cash and Bank Balance to Total Deposit Ratio:

The ratio shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank. But too high ratio is not favorable for the bank because it produces adverse effect in profitability due to idleness of high interest bearing fund.

Cash and bank balance to total deposit ratio.
Table-4.3
Figure-4.3

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | C.B.B | T. Dep. | Ratio | C.B.B | T. Dep. | Ratio |
| $2059 / 60$ | 926535 | 7922773 | 11.69 | 1333353 | 6522816 | 20.44 |
| $2060 / 61$ | 1226923 | 11524679 | 10.65 | 864426 | 7198327 | 12.01 |
| $2061 / 62$ | 1340481 | 14254573 | 9.40 | 723745 | 8654774 | 8.36 |
| $2062 / 63$ | 2335521 | 18927305 | 12.34 | 1118158 | 11002040 | 10.16 |
| $2063 / 64$ | 2441514 | 24488855 | 9.97 | 1122690 | 11445286 | 9.81 |
| Total | 54.05 |  | 60.78 |  |  |  |
| Mean |  | 10.81 |  | 12.16 |  |  |
| S.D. | 1.08 |  | 4.3 |  |  |  |
| C.V. | 9.99 |  | 35.39 |  |  |  |




The comparative table and figure shows that the cash and bank balance and total deposit ratios of both banks have in fluctuating tend through out, from the study period.

The mean ratios of cash and bank balance to total deposit ratio of NSBIB is considerably greater than NIB, i.e. $60.79>10.81$. It is found NSBIB less successful to utilize the fund of total deposit that may automatically affect the operating profit. And coefficient of variation of NSBIB is greater than NIB, i.e, 35.39>9.99. It means that the variability of ratios of NIB is more uniform than that of NSBIB. So it is quite obvious from the study that NIB's liquidity position in relation to this ratio is better than that of NSBIB.

### 4.1.1.4. NRB Balance to Current and Saving Deposit Ratio:

Commercial bank are required to hold certain portion of current and saving deposits in Nepal Rastra Bank's account. It is to ensure smooth functioning and sound liquidity position of the bank. As per the directive to Nepal Rastra Bank, the required ratio is $8 \%$ therefore, the ratio measures whether the bank is following the direction to NRB or not.

NRB balance to current and saving deposit ratio
Table-4.4

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | ---: |
| Year | N.R.B.B | C.S.D. | Ratio | N.R.B.B | C.S.D. | Ratio |
| $2059 / 60$ | 450481 | 3414063 | 13.19 | 894124 | 2933098 | 30.48 |
| $2060 / 61$ | 545620 | 6386205 | 8.54 | 580452 | 3715696 | 15.62 |
| $2061 / 62$ | 780243 | 8286543 | 9.42 | 390025 | 4232344 | 9.22 |
| $2062 / 63$ | 1526066 | 9787647 | 15.59 | 626123 | 4240936 | 14.76 |
| 2063/64 | 1381351 | 12917360 | 10.69 | 556678 | 5205122 | 10.69 |
| Total | 57.44 | Total | 80.78 |  |  |  |
| Mean | 11.49 | Mean | 16.15 |  |  |  |
|  |  | 11.49 |  | 16.16 |  |  |
| S.D. | 2.58 | S.D. | 7.56 |  |  |  |
| C.V. | 22.46 | C.V. | 46.79 |  |  |  |

Figure-4.4


The comparative table and figure shows that the NRB balance to current and saving deposit ratio of both banks have in fluctuating trend through out from the study period.

The mean ratio of NRB balance to current and saving deposit ratio of NSBIB is comparatively greater than NIB, i.e. $16.15>11.49$ and the coefficient of variation of NSBIB is also greater than NIB, i.e, 46.79>22.46. It means the variability of ratios of NIB is ore uniform than NSBIB.

The higher mean ratio of balance with NRB to total deposit of NSBIB reveals that the liquidity position with regard to this ratio is more satisfactory than NIB. However, both of them have not been adopting constant policy in relation to his ratio.

### 4.1.1.5. NRB Balance to Fixed Deposit Ratio:

It shows the percentage of amount deposited by the bank in Nepal Rastra Bank as compared to the fixed deposits. According to the direction of NRB, the ratio should be maintained $6 \%$. Hence the ratio so calculated finds whether the bank has obeyed the direction of NRB or not.

NRB balance to fixed deposit rati
Table-4.5

| Bank |  |  | NIB |  |  | NSBIB |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | ---: | :---: | :---: |
| Year | N.R.B.B | F.deposit | Ratio | N.R.B.B | F.deposit | Ratio |  |  |
| $2059 / 60$ | 450481 | 1672821 | 26.93 | 894124 | 3337574 | 26.79 |  |  |
| $2060 / 61$ | 545620 | 2294680 | 23.78 | 580452 | 3352270 | 17.32 |  |  |
| $2061 / 62$ | 780243 | 3212265 | 24.29 | 390025 | 4086358 | 9.54 |  |  |
| $2062 / 63$ | 1526066 | 5412969 | 28.19 | 626123 | 6116172 | 10.24 |  |  |
| $2063 / 64$ | 1381351 | 7516686 | 18.38 | 556678 | 5517466 | 10.09 |  |  |
| Total | 121.57 |  |  | 73.98 |  |  |  |  |
| Mean | 24.31 |  |  | 14.80 |  |  |  |  |
| S.D. | 3.39 |  |  | 6.64 |  |  |  |  |
| C.V. | 13.94 |  | 44.88 |  |  |  |  |  |

Figure-4.5


The comparative table and figure shows that the NRB balance to fixed deposit ratio of both banks have in fluctuation trend through out from the study period. The mean ratio of NRB balance to fixed deposit ratio of NIB is greater than NSBIB, i.e. $24.31>14.80$, and coefficient of variation between ratios of NSBIB is also greater than NIB i.e. $44.88>13.94$. It means that the variability of ratios of NIB is uniform than NSBIB.

The higher mean ratio of NSBIB shows the higher percentage of amount deposited by the in NRB, as compared to fixed deposit than NIB. Both the bank has obeyed the direction of central bank.

### 4.1.1.6. Fixed Deposit to Total Deposit Ratio:

The ratio shows what percentage of total deposit has been collected in form of fixed deposit. High ratio indicates better opportunity available to the bank to invest in sufficient profit generating long-term loans. Low ratio means the bank should invest the fund of low cost in short term loans.

Fixed deposit to total deposit ratio.
Table-4.6 000

| Bank | NIB |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | F. Dep. | T. Dep | Ratio | F. deposit | T. Dep. | Ratio |
| $2059 / 60$ | 1672821 | 7922773 | 21.11 | 3337574 | 6522816 | 51.17 |
| $2060 / 61$ | 2294680 | 11524679 | 19.91 | 3352270 | 7198327 | 46.57 |


| 2061/62 | 3212265 | 14254573 | 22.53 | 4086358 | 8654774 | 47.22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2062/63 | 5412969 | 18927305 | 28.60 | 6116172 | 11002040 | 55.59 |
| 2063/64 | 7516686 | 24488855 | 30.69 | 5517466 | 11445286 | 48.21 |
| Total |  |  | 122.85 |  |  | 248.75 |
| Mean |  |  | 24.57 |  |  | 49.75 |
| S.D. |  |  | 4.28 |  |  | 3.32 |
| C.V. |  |  | 17.42 |  |  | 6.67 |

Figure-4.6


The comparative table and figure shows that the ratio of fixed deposit to total deposit of both bank has in fluctuating trend through out from the study period. The
mean ratio of fixed deposit to total deposit ratio of NSBIB is greater than that of NIB, i.e. $49.73>24.57$ and the coefficient of variation between ratios of NIB is considerably greater than that of NSBIB, i.e. $17.42>6.67$. It means that the variability of ratios of NSBIB is more uniform than that of NIB.

The higher mean ratio of fixed deposit to total deposit ratio of NSBIB indicates better opportunity available to the bank to invest in sufficient profit generation long term investments in comparison than that of NIB.

### 4.1.2 Leverage Ratios.

The long-term financial position to the firm is judged by the leverage or capital structure ratios. The leverage ratios are calculated to measure the financial risk and the firm's ability to using debt or, the benefit of the shareholder. These ratios measure the proportion of outsides fund and owner's capital used in the banks. The following ratios are used.

### 4.1.2.1. Total Debt to Equity Ratio:

The ratio shows the mix of debt and equity in capital. It measures creditor's claims against owner. A high ratio shows that the creditor claims are greater than those of owners. Such a situation introduces inflexibility in the firm's operation due to the increasing interference and pressures from creditors.

Low ratio implies a greater claim of owners than creditors. In such a situation shareholders are less benefited if economic activities are good enough. Therefore, the ratio should neither be too high nor too low.

Total debt to equity ratio:
Table 4.7
'000'

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | T.Debt | S.H.E | Ratio | T.Debt | S.H.E | Ratio |
| $2059 / 60$ | 792276 | 638541 | 124.08 | 65228160 | 569852 | 114.47 |
| $2060 / 61$ | 1152468 | 295293 | 390.28 | 719832 | 626637 | 114.87 |
| $2061 / 62$ | 1425457 | 295293 | 482.73 | 865477 | 689013 | 125.61 |
| $2062 / 63$ | 1892730 | 1415439 | 133.72 | 1100204 | 982373 | 111.99 |
| $2063 / 64$ | 2448885 | 638541 | 383.51 | 1144528 | 1163291 | 98.39 |
| Total | 1514.31 |  | 565.33 |  |  |  |
| Mean | 302.86 |  | 113.07 |  |  |  |
| S.D. |  | 146.33 |  | 8.71 |  |  |
| C.V. | 48.31 |  | 7.7 |  |  |  |

Figure 4.7


The comparative table and figure shows that the ratio of total debt to shareholder's equity of the bank has in fluctuating trend through out from the study period.

The mean ratio of total debt to shareholder's equity of NIB is high greater than that of NSBIB, i.e. $302>113$ and the coefficient of variation between ratios of NIB is also greater than NSIB, i.e. $48.31>7.7$. It means that the variability of ratios of NSBIB is more uniform than that of NIB.

The high mean ratio of total debt to shareholder's equity of NIB reveals the higher creditor's claim against owners than that of NIB.

### 4.1.2.2. Total Debt to Total Assets Ratio:

This ratio shows the contribution of creditors in financing the assets of the bank. High ratio indicates that the greater portion of the bank's assets been financed through the outsider's fund. The ratio should be neither too high nor too low.

Total debt to total assets ratio.
Table-4.8

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | T.Debt | T.asset | Ratio | T.Debt | T.asset | Ratio |
| $2059 / 60$ | 7922766 | 9042510 | 87.62 | 7922766 | 7566326 | 104.71 |
| $2060 / 61$ | 11524680 | 13463937 | 85.60 | 7198327 | 8440405 | 85.28 |
| $2061 / 62$ | 14254574 | 16390652 | 86.97 | 8654774 | 10345373 | 83.66 |
| $2062 / 63$ | 18927306 | 21732081 | 87.09 | 11002040 | 13035839 | 84.40 |
| $2063 / 64$ | 24488856 | 28073517 | 87.23 | 11445286 | 13901200 | 82.33 |
| Total |  | 434.51 |  |  | 440.38 |  |
| Mean |  | 86.90 |  | 88.08 |  |  |
| S.D. |  | 0.69 |  | 8.37 |  |  |
| C.V. | 0.79 |  | 9.5 |  |  |  |

Figure-4.8


The comparative table and figure shows that the mean debt assets ratio of NIB is considerably greater than that of NSBIB. i.e. $88.08>86.90$ and the coefficient of
variation between ratios of NSBIB is greater than that of NIB. i.e. 9.5>.97. It means that the variability of ratios of NIB is more uniform than NSBIB.

The high mean ratio of NIB reveals that the bank has been able to finance the outsider's fund in the bank assets. Which means the higher contributions of creditors in financing the assets of the bank?

### 4.1.2.3. Debt to Total Capital Ratio:

Total capital refers to the sum of interest bearing debt and net shareholders equity. It shows the proportion to debt in total capital employed by the bank. High ratio indicates greater claim of creditor's. On the contrary, low ratio is the indication of lesser claim of outsiders. For the sound solvency position, the ratio should not be too high or too low.

Debt to total capital ratio.
Table-4.9

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | T. Deb. | T. Cap | Ratio | T. Deb. | T . Cap | Ratio |
| $2059 / 60$ | 7922766 | 8375710 | 94.59 | 7922766 | 8862760 |  |
| $2060 / 61$ | 1152468 | 1299380 | 88.69 | 7198327 | 9172040 |  |
| $2061 / 62$ | 14254574 | 11578770 | 123.11 | 8654774 | 9448760 |  |
| $2062 / 63$ | 18927306 | 20941990 | 90.38 | 11002040 | 12242570 |  |
| $2063 / 64$ | 24488856 | 28516190 | 85.88 | 11445286 | 12444800 | 99.87 |
| Total |  |  | 482.65 |  |  | 91.97 |
| Mean |  | 96.53 |  |  | 441.31 |  |
| S.D. |  | 13.59 |  |  | 88.26 |  |
| C.V. |  | 14.07 |  |  | 5.95 |  |



Figure-4.9
The comparative table and figure shows that the debt to total capital ratio of both banks have in constant trend through out the study period. Though, the mean ratio and coefficient of variation of NIB is comparatively greater than NSBIB. i.e. 96.53>88.26. and $14.07>5.61$ respectively. It means the variability of ratios of NSBIB is more uniform than NIB.

The higher mean ratio of NIB indicates the higher claim of creditors that means higher capital employed by the bank and greater proportion of debt in total capital employed.

### 4.1.2.4. Interest Coverage Ratio:

The ratio is also known as times interest earned ratio is used to test the debt servicing capacity of the bank. It shows the numbers to times the interest charge are covered by funds that are ordinarily available for the payment. It indicates the extent to which the earning may fall with out causing any embarrassment to the regarding the payment of interest.

Higher ratio is desirable, but too high ratio indicates the firm is very conservative in using debt. A lower ratio indicated excessive use of debt or insufficient operation.
Interest coverage ratio.
able-4.10
‘000'

| Bank |  |  | NIB |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | EBIT | Int.Charg | Ratio | EBIT | Int.Charg | Ratio |  |  |
| $2059 / 60$ | 200484 | 1892213 | 10.60 | 357235 | 291819 |  |  |  |
| $2060 / 61$ | 322565 | 326202 | 98.89 | 256920 | 255919 | 100.41 |  |  |
| $2061 / 62$ | 474085 | 354549 | 133.71 | 285570 | 258430 | 110.50 |  |  |
| $2062 / 63$ | 608722 | 490946 | 123.99 | 219740 | 334770 |  |  |  |
| $2063 / 64$ | 853094 | 685530 | 124.44 | 379048 | 412261 |  |  |  |
| Total |  | 491.63 |  |  | 95.64 |  |  |  |
| Mean |  | 98.33 |  |  | 490.89 |  |  |  |
| S.D. |  | 45.36 |  |  | 98.18 |  |  |  |
| C.V. |  | 46.1 |  | 19.19 |  |  |  |  |

Figure-4.10


The comparative table figure shows that the ratios of EBIT to interest charge are constant during the study period. Though, the mean ratio of interest coverage ratio of NIB is comparatively greater than NSBIB, i.e. $98.33>98.18$ and coefficient of variation
between ratios of NIB is greater than NSBIB, i.e. $46.1>19.19$. It means the variability of ratios of NSBIB is more uniform than NIB.

The higher mean interest coverage ratio of NIB measures the higher percentage of net worth in relation to the total deposit collected in the bank as comparison to NSBIB.

### 4.1.3 Capital Adequacy Ratios.

Capital adequacy ratio measures whether the firm has maintained sufficient capital or not. In other words, it helps to decide whether the existing capital is adequate to there is not need or reforms. The ratio is tested to ensure the safety and stability of the firm in long run.

### 4.1.3.1 Net Worth to Total Deposit Ratio:

The ratio measures the percentage of net worth in relation to the total deposits collected in the bank. The ratio is a yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank.

Net worth to total deposit ratio.
Table 4.11

| Bank | NIB |  | NSBIB |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Net. W. | T. Dep. | Ratio | Net. W. | T. Dep. | Ratio |
| $2059 / 60$ | 638541 | 9014251 | 7.08 | 569851 | 6522816 | 8.74 |
| $2060 / 61$ | 729047 | 13463937 | 5.41 | 626636 | 7198327 | 8.71 |
| $2061 / 62$ | 1180173 | 16390652 | 7.20 | 689013 | 8654774 | 7.96 |
| $2062 / 63$ | 1415439 | 21732081 | 6.51 | 9823737 | 11002040 | 89.29 |
| $2063 / 64$ | 1878123 | 28073517 | 6.69 | 1163290 | 11445286 | 10.16 |
| Total |  | 32.90 |  |  | 124.86 |  |
| Mean |  | 6.58 |  |  | 24.97 |  |
| S.D. | 0.63 |  |  | 32.16 |  |  |
| C.V. | 9.66 |  | 128.81 |  |  |  |

Figure-4.11


The comparative table shows that the ratios of net worth to total deposit of NSBIB is more fluctuating trend than that of NIB.

The mean ratio of net worth to total deposit of NIB is greater than that of NSBIB, i.e. 24.97>6.58. Similarly CV of NSBIB is greater than NIB, i.e. 12.81>9.66. Thus the variability of ratios of NIB is more uniform than NSBIB.

The high mean ratio of net worth to total deposit of NIB shows the bank has maintained the more capital fund according to the direction of NRB than that of NSBIB.
4.1.3.2. Net worth to total assets ratio.

Net worth includes share capital and shareholder's reserves. It means the relative proportion of the shareholders fund with respect to the credit. High ratio shows that the firm has adequate capital, which is the index of safety. Moreover, a bank with higher ratio is less affected by the instability of the financial market.

Net worth to total assets ratio.

Table-4. 12

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Net. W. | T. Ass | Ratio | Net. W. | T. Ass | Ratio |
| $2059 / 60$ | 638541 | 9014251 | 7.08 | 569851 | 7566326 | 7.53 |
| $2060 / 61$ | 729047 | 13463937 | 5.41 | 626636 | 8440405 | 7.42 |
| $2061 / 62$ | 1180173 | 16390652 | 7.20 | 689013 | 10345373 | 6.66 |
| $2062 / 63$ | 1415439 | 21732081 | 6.51 | 823737 | 13035839 | 6.32 |
| $2063 / 64$ | 1878123 | 28073517 | 6.69 | 1163290 | 13901200 | 8.37 |
| Total |  | 32.90 |  |  | 36.30 |  |
| Mean |  | 6.58 |  |  | 7.26 |  |
| S.D. | 0.63 |  |  | 0.72 |  |  |
| C.V. | 9.66 |  |  | 9.88 |  |  |

Figure-4.12


The comparative table shows that the ratios of net worth to total assets ratio of both banks are in fluctuating trend.

The mean ratio of net worth of total assets NSBIB is greater than NIB, i.e. 7.26>6.58. Similarly, CV of NSBIB is greater than NIB, i.e. 9.88>9.66. Thus the variability of ratios of NIB is more homogeneous than NSBIB.

The higher mean ratio if net worth to total assets of NSBIB shows the bank has adequate capital and was less affected by the instability of financial market than NIB.

### 4.1.3.3. $\quad$ Net Worth to Total Capital Ratio.

It means the relative proportion of net worth with respect to the total capital. High ratio shows that the firm has adequate capital, which is the index of safety. Moreover, a bank with higher ratio is less affected by the instability of the financial market.

Net Worth to Total Capital Ratio.
Table-4. 13

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Net. W. | T. Capi | Ratio | Net. W. | T. Capi | Ratio |
| $2059 / 60$ | 638541 | 8375710 | 7.62 | 569851 | 8862760 | 6.43 |
| $2060 / 61$ | 99047 | 1299380 | 7.62 | 626636 | 9172040 | 6.83 |
| $2061 / 62$ | 1180173 | 11578770 | 10.19 | 689013 | 9448760 | 7.29 |
| $2062 / 63$ | 1415439 | 20941990 | 6.76 | 823737 | 12242570 | 6.73 |
| $2063 / 64$ | 1878123 | 28516190 | 6.59 | 1163290 | 12444800 | 9.35 |
| Total |  | 38.78 |  |  | 36.63 |  |
| Mean |  | 7.76 |  | 7.33 |  |  |
| S.D. | 1.29 |  | 1.05 |  |  |  |
| C.V. | 16.62 |  | 14.32 |  |  |  |

Figure-4.13


The comparative table shows that the ratios of net worth to total capitals ratio of both banks are in fluctuating trend.

The mean ratio of net worth of total capitals NIB is greater than NSBIB, i.e. 7.76>7.33. Similarly, CV of NSBIB is greater than NIB, i.e. 16.62>14.32. Thus the variability of ratios of NIB is more homogeneous than NSBIB.

The higher mean ratio if net worth to total assets of NIB shows the bank has adequate capital and was less affected by the instability of financial market than NSBIB.

### 4.1.4. Turnover /Activity Ratios.

Turnover ratios also known as utilization ratios are employed to evaluate the efficiently with which the firm manages and utilizes its assts. They measure how effectively the form uses the investments are made in order to produce profitable sales. Unlike other manufacturing concerns, the bank produces loans, advances and other innovation, so it sells the same.

High ratio depicts the managerial efficiently in utilizing the resources. They show the sound profitability position of the bank. Low ratio is the result of insufficient utilization of resources. However, too high ratio is also not good enough as it may be due to the insufficient liquidity.

### 4.1.4.1 Loans and Advances to Total Deposit Ratio:

The ratio indicates the proportion of total deposits invested in loans and advances. High ratio means the greater use of deposit for investing in loans and advances. But very high ratio shows poor liquidity position and risk in loans. On the contrary, too low ratio may be the cause of idle cash or use of and in loess productive sector.

Loans and advances to total deposit ratio table
Table-4. 14
'000'

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | L\& add | T.deposit | Ratio | L \$ add | T.deposit | Ratio |
| $2059 / 60$ | 5796432 | 7922773 | 73.16 | 4468719 | 6522816 | 68.51 |
| $2060 / 61$ | 7130125 | 11524679 | 61.87 | 5143662 | 7198327 | 71.46 |
| $2061 / 62$ | 10126055 | 14254573 | 71.04 | 6213878 | 8654774 | 71.80 |
| $2062 / 63$ | 12776208 | 18927305 | 67.50 | 7626736 | 11002040 | 69.32 |
| $2063 / 64$ | 17286427 | 24488855 | 70.59 | 9460450 | 11445286 | 82.66 |
| Total | 344.16 |  |  | 363.74 |  |  |
| Mean |  | 68.83 |  | 72.75 |  |  |
| S.D. | 3.92 |  | 5.11 |  |  |  |
| C.V. | 5.7 |  | 7.02 |  |  |  |

Figure-4.14


The comparative table and figure shows the ratios of loan advance to total deposit ratio of both banks are in fluctuating trend. The mean ratio of loan and advances to total deposit of NSBIB is greater than that of NIB, i.e. $72.75>68.83$.

Similarly, CV of NSBIB is greater than NIB, i.e. $7.02>5.07$. Thus the variability of ratios of NIB is more uniform than NSBIB. The higher mean ratio of loan and advance to total deposit of NSBIB reveals that the bank greater use of deposit for investing in loans and advances.

### 4.1.4.2 Loan and Advances to Fixed Deposit Ratio:

The ratio indicates what proportion of fixed deposit has been used for loans and advances. Since fixed deposits carry high rate of interest, funds so collected need to be invested in such sectors which yield at least sufficient return to meet the obligation. High ratio means utilization of the fixed deposit in form of loans.

The comparative table shows that the ratios of loan and advance to fixed deposit ratio of both banks are in fluctuating trend in the period of the study. The mean ratio of loan and advances to fixed deposit of NSBIB is greater than NIB, i.e. 72.75>28.77. Similarly, the CB of NIB is greater than that CV of NSBIB, i.e. $3.48>36.31$. Thus the variability of ratios of NSBIB is more homogenous than NIB.

Loan and advances to fixed deposit ratio:

Table-4.15
'000'

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | L\& add | F.deposit | Ratio | L \$ add | T.deposit | Ratio |
| $2059 / 60$ | 579643 | 1672821 | 34.65 | 4468719 | 6522816 | 68.51 |
| $2060 / 61$ | 713012 | 2294680 | 31.07 | 5143662 | 7198327 | 71.46 |
| $2061 / 62$ | 1012605 | 3212265 | 31.52 | 6213878 | 8654774 | 71.80 |
| $2062 / 63$ | 1277620 | 5412969 | 23.60 | 7626736 | 11002040 | 69.32 |
| $2063 / 64$ | 1728642 | 7516686 | 23.00 | 9460450 | 11445286 | 82.66 |
| Total |  | 143.85 |  |  | 363.74 |  |
| Mean | 28.77 |  | 72.75 |  |  |  |
| S.D. | 4.63 |  | 5.11 |  |  |  |
| C.V. | 16.11 |  | 7.02 |  |  |  |

Figure-4.15


The higher mean ratio reveals that NSBIB's more opportunity to yield sufficient return to meet the obligation and utilization of fixed deposit in form of loans and advances in comparison to NIB.

### 4.1.4.3 Loan and Advances to Saving Deposit Ratio:

The ratio measures what extent of saving deposit has been turned over to loans and advances. Saving deposit also, being and interest bearing liability, needs to be invested in productive sector. High ratio indicates greater utilization of the saving deposits in advancing loans.

The comparative table shows that the ratio of loan and advance to saving deposit ratio of both banks is fluctuating trend in the period of the study.

Loan and advances to saving deposit ratio.
Table-4.16

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | L\& add | S.Dep | Ratio | L \$ add | S.Dep | Ratio |
| $2059 / 60$ | 5796432 | 2434051 | 238.14 | 4468719 | 1633027 | 273.65 |
| $2060 / 61$ | 7130125 | 4886100 | 145.93 | 5143662 | 2043021 | 251.77 |
| $2061 / 62$ | 10126055 | 6703512 | 151.06 | 6213878 | 2458800 | 252.72 |
| $2062 / 63$ | 12776208 | 80081980 | 15.95 | 7626736 | 2832639 | 269.24 |
| $2063 / 64$ | 17286427 | 10742331 | 160.92 | 9460450 | 3274690 | 288.90 |
| Total | 711.99 |  |  | $1,336.27$ |  |  |
| Mean | 142.40 |  | 267.25 |  |  |  |
| S.D. | 71.53 |  | 13.88 |  |  |  |
| C.V. | 0.7 |  | 5.19 |  |  |  |

Figure-4.16


The mean ratio of loan and advances to saving deposit of NSBIB is greater than NIB, i.e. $267.25>142.40$. Similarly, the CV in ratios NSBIB is also grater than NIB, i.e. 5.19>.7. Thus $t$ he variability of ratios of NIB is more homogeneous than NSBIB. The higher mean ratio of loan and advance to saving deposit of NSBIB reveals that the bank has been able to turn over saving deposit into loan and advance in higher extent with regard to NIB.

### 4.1.4.4 Loan and Advance to Total Assets Ratio.

It ratio measures what extent of total assets have been turned over to loans and advances. High ratio indicates greater utilization of the total assets in advancing loans.

The comparative table shows that the ratio of loan and advance to total assets ratio of both banks is fluctuating trend in the period of the study.

Loan and advance to total assets ratio.

Table-4.17
‘000'

| Bank | NIB |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | L\& add | T. Ass | Ratio | L \$ add | T. Ass | Ratio |
| $2059 / 60$ | 5796432 | 9014251 | 64.30 | 4468719 | 7566326 | 59.06 |
| $2060 / 61$ | 7130125 | 13463937 | 52.96 | 5143662 | 8440405 | 60.94 |
| $2061 / 62$ | 10126055 | 16390652 | 61.78 | 6213878 | 10345373 | 60.06 |
| $2062 / 63$ | 12776208 | 21732081 | 58.79 | 7626736 | 13035839 | 58.51 |
| $2063 / 64$ | 17286427 | 28073517 | 61.58 | 9460450 | 13901200 | 68.05 |
| Total |  | 299.40 |  |  | 306.63 |  |
| Mean | 59.88 |  |  | 61.33 |  |  |
| S.D. | 3.88 |  |  | 3.54 |  |  |
| C.V. |  | 6.47 |  | 5.79 |  |  |

Figure-4.17


The mean ratio of loan and advances to total assets of NSBIB is greater than NIB, i.e. $61.33>53.88$. Similarly, the CV in ratios NIB is grater than NSBIB, i.e. 6.47>5.79. Thus the variability of ratios of NSBIB is more homogeneous than NIB. The higher mean ratio of loan and advance to total assets of NSBIB reveals that the bank has been able to turn over total assets into loan and advance in higher extent with regard to NIB.

### 4.1.4.5 Investment to Total Deposit Ratio:

Investment comprises investment its HMG treasury bills, development bonds, company, shares and other type of investment. The ratio shows how efficiently the major resources of the bank have been mobilized. High ratio indicates managerial efficiency regarding the utilization of deposits. Low ratio is the result of less efficiency in use of funds.

Investment to total deposit ratio:
Table-4.18
‘000'

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Invest | T. Dep | Ratio | Invest | T. Dep. | Ratio |
| $2059 / 60$ | 1707241 | 9014251 | 18.94 | 1207275 | 6522816 | 18.51 |
| $2060 / 61$ | 13255496 | 13463937 | 98.45 | 1907520 | 7198327 | 26.50 |
| $2061 / 62$ | 16274063 | 16390652 | 99.29 | 2607680 | 8654774 | 30.13 |
| $2062 / 63$ | 5602868 | 21732081 | 25.78 | 3758975 | 11002040 | 34.17 |
| $2063 / 64$ | 6505679 | 28073517 | 23.17 | 2659452 | 11445286 | 23.24 |
| Total | 265.64 |  |  | 132.54 |  |  |
| Mean | 53.13 |  | 26.51 |  |  |  |
| S.D. | 37.41 |  | 5.41 |  |  |  |
| C.V. | 70.42 |  | 20.41 |  |  |  |

Figure4.18


The comparative table shows that the ratios of investment to total deposit ratio of both banks are in fluctuating trend during the period of the study

Any way the mean ratio of investment to total deposit of NIB is greater than NSBIB, i.e. 53.13>26.51. Similarly, the CV in ratios NIB is grater than NSBIB, i.e. $70.42>20.41$. Thus the variability of ratios of NSBIB is more homogeneous than NIB.

The higher mean ratio of investment of to total deposit of NIB reveals that the bank has been able to turn over total deposit into loan and advance in higher extent with regard to NSBIB.

### 4.1.5 Profitability Ratios.

Profitability is a measure to efficiency and the search for tit provides and incentive to achieve efficiency. Profitability also indicates public acceptance of the product and shows that the firm can produce competitively.

Moreover, profits prodlvide the money for repaying the debt incurred to finance the project and the resource for the internal financing expansion. The profitability of a firm can be measured by its profitability ratios. Here, profitability ratios can be determined on the basis of investment. The following are the major profitability ratios used in this study.

### 4.1.5.1 Return on Total Assets Ratio:

Net profit refers to the profit after deduction of interest and tax. Total assets mean the assets that appear in assets right side of balance sheet. It measures the sufficiency of bank in utilization of the overall assets. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank.

Return on total assets ratio
Table-4.19

| Bank | NIB |  | NSBIB |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | NAPT | T. Ass | Ratio | NAPT | T. Ass | Ratio |
| $2059 / 60$ | 359361 | 9014251 | 3.99 | 48748 | 7566326 | 0.64 |
| $2060 / 61$ | 577931 | 13463937 | 4.29 | 60851 | 8440405 | 0.72 |
| $2061 / 62$ | 913713 | 16390652 | 5.57 | 57386 | 10345373 | 0.55 |
| $2062 / 63$ | 45950 | 21732081 | 0.21 | 117001 | 13035839 | 0.90 |
| $2063 / 64$ | 121354 | 28073517 | 0.43 | 254908 | 13901200 | 1.83 |
| Total |  | 14.50 |  |  | 4.65 |  |
| Mean | 2.90 |  |  | 0.93 |  |  |
| S.D. | 2.17 |  | 0.46 |  |  |  |
| C.V. | 74.94 |  | 50.02 |  |  |  |

Figure-4.19


The comparative table and figure listed below reveals that the ratios of NAPT to total assets of both banks are in fluctuating trend during the period of study.

The mean ratio of return on total assets of NIB is greater than that of NSBIB, i.e. 2.90>0.93. Similarly, the CV of ratios of NSBIB is greater than NIB, i.e. 74.94.>50.02. Thus the variability of NIB is more consistent than NSBIB.

From the above table we can conclude that NIB has been able to utilize its overall resources in efficient way in comparison with NSBIB during the study period. It also reflects the successes of management.

### 4.1.5.2 Return on Net worth Ratio:

The ratio is tested to see the profitability of the owner's investment. It reflects the extent to which the objective of business is accomplished. The ratio is of great interest to present as well as prospective shareholders and also of great significance to management, which has the responsibility of maximizing the owner's welfare.

Return of net worth ratio
Table-4.20

| Bank | NIB |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | NAPT | Net. W. | Ratio | NAPT | Net. W. | Ratio |
| $2059 / 60$ | 359361 | 638541 | 56.28 | 48748 | 569851 | 8.55 |
| $2060 / 61$ | 577931 | 990470 | 58.35 | 60851 | 626636 | 9.71 |
| $2061 / 62$ | 913713 | 1180173 | 77.42 | 57386 | 689013 | 8.33 |
| $2062 / 63$ | 45950 | 1415439 | 3.25 | 117001 | 823737 | 14.20 |
| $2063 / 64$ | 121354 | 1878123 | 6.46 | 254908 | 1163290 | 21.91 |
| Total |  | 201.76 |  |  | 62.71 |  |
| Mean |  | 40.35 |  |  | 12.54 |  |
| S.D. | 29.92 |  | 5.14 |  |  |  |
| C.V. | 74.15 |  | 41.01 |  |  |  |

Figure-
4.20


The comparative table reveals that the ratios of net profit after tax to net worth of NIB is more fluctuating trend than that of NSBIB during the period of study.

The mean ratio of NAPT to net worth of NIB is greater than NSBIB, i.e. $40.35>12.54$. Similarly, the CV of ratios of NIB is greater than that CV of the ratios of NSBIB, i.e. $74.15>41.01$. Thus, the variability of ratios of NSBIB is more consistent than NIB.

### 4.1.5.3 Return on Total Deposit Ratio:

The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio is the index of strong profitability position.

Return on total deposit ratio
Table-4.21
‘000’

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | NAPT | T. Dep | Ratio | NAPT | T. Dep. | Ratio |
| $2059 / 60$ | 359361 | 9014251 | 3.99 | 48748 | 6522816 | 0.75 |
| $2060 / 61$ | 577931 | 13463937 | 4.29 | 60851 | 7198327 | 0.85 |
| $2061 / 62$ | 913713 | 16390652 | 5.57 | 57386 | 8654774 | 0.66 |
| $2062 / 63$ | 45950 | 21732081 | 0.21 | 117001 | 11002040 | 1.06 |
| $2063 / 64$ | 121354 | 28073517 | 0.43 | 254908 | 11445286 | 2.23 |
| Total | 14.50 |  |  | 5.55 |  |  |
| Mean | 2.90 |  | 1.11 |  |  |  |
| S.D. | 2.17 |  | 0.57 |  |  |  |
| C.V. | 74.82 |  | 51.85 |  |  |  |

Figure-4.21


The comparative table and figure reveals that the ratios of NAPT total deposit ratio of both banks are in fluctuating trend during the period of study. The mean ratio of NAPT to total deposit of NIB is greater than NSBIB, i.e2.90>1.11. The coefficient of variation of the ratios of NIB is greater than NSBIB, i.e. 74.82>51.85. Thus the variability of NIB is more consistent than that of NSBIB.

The higher mean ratio of NIB is the higher profitability position in relation with owner's investment. If also reflects the significance of management of NIB in comparison to NSBIB, whose responsibility is maximizing the owner's welfare.

### 4.1.5.4 Total Interest Expenses to Total Interest Income Ratio:

Total interest expenses consist of interest expenses incurred for deposits, borrowing and loan taken by the bank. Total interest income includes interest income received from loans and advances, cash credit, overdrafts, government securities, inter bank loans and other investments.

The ratio shows the percentage of interest expenses incurred in relation to the interest income realized. Lower ratio is favorable from profitability point of view.

Total interest expenses to total interest income ratio
Table-4.22 '000'

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Int. exp | Int. inc | Ratio | Int. exp | Int. inc | Ratio |
| $2059 / 60$ | 189213 | 459509 | 41.18 | 291819 | 469740 | 62.12 |
| $2060 / 61$ | 326202 | 731402 | 44.60 | 255919 | 493598 | 51.85 |
| $2061 / 62$ | 354549 | 886799 | 39.98 | 258430 | 578372 | 44.68 |
| $2062 / 63$ | 490946 | 1172742 | 41.86 | 334770 | 708718 | 47.24 |
| $2063 / 64$ | 685530 | 1584987 | 43.25 | 412261 | 831116 | 49.60 |
| Total | 210.87 |  |  | 255.49 |  |  |
| Mean | 42.17 |  | 51.10 |  |  |  |
| S.D. | 1.61 |  | 6.01 |  |  |  |
| C.V. | 3.81 |  | 11.57 |  |  |  |

Figure-4.22


The comparative table and figure reveals that the ratios of interest expenses to interest income of both banks are in fluctuating trend during the period of study.

The mean ratio of interest expenses to interest income of NSBIB is greater that that of the mean ratio of NIB, i.e. $51.10>43$.17The coefficient of variation of the ratios of NIB is greater than the CV of NSBIB, i.e. 11.57>3.81Thus the variability of the ratio of the ratio of NSBIB is more consistent than NIB.

The Higher mean ratio of NSBIB shows the higher percentage of interest expenses incurred in relation to the interest income. Thus, form the above analysis we can conclude that NSBIB has been able to minimize interest expenses in relation to interest income.

### 4.1.5.5 Interest Earned to Total Assets Ratio:

The ratio shows the percentage of interest income as compared to the assets of the bank. High ratio indicates the proper utilization of bank's assets for income generating purpose. Low ratio represents unsatisfactory performance.

Interest earned to total assets ratio.
Table-4.23

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Int. inc | T. Ass | Ratio | Int. inc | T. Ass | Ratio |
| $2059 / 60$ | 459509 | 9014251 | 5.10 | 469740 | 7566326 | 6.21 |
| $2060 / 61$ | 731402 | 13463937 | 5.43 | 493598 | 8440405 | 5.85 |
| $2061 / 62$ | 886799 | 16390652 | 5.41 | 578372 | 10345373 | 5.59 |
| $2062 / 63$ | 1172742 | 21732081 | 5.40 | 708718 | 13035839 | 5.44 |
| $2063 / 64$ | 1584987 | 28073517 | 5.65 | 831116 | 13901200 | 5.98 |
| Total |  | 26.98 |  | 29.06 |  |  |
| Mean | 5.40 |  | 5.81 |  |  |  |
| S.D. | 0.17 |  | 0.27 |  |  |  |
| C.V. | 3.25 |  | 4.71 |  |  |  |

'000'

Table 4.23


The comparative table figure reveals that the ratio of interest earned to total assets of both banks are in fluctuating trend during the period of study. The mean ratio of interest earned to total assets of NSBIB is greater than NIB, i.e. 5.81>5.40.

The CV of the ratio of NSBIB is greater than the CV of NIB, i.e. 4.71>3.25. Thus the variability of the ratio of NIB is more consistent than NSBIB. The higher mean ratio of NSBIB reflects the proper utilization of total assets for income generating purpose that of NIB during the study period.

### 4.1.5.6 Staff Expenses to Total Income Ratio:

Staff expenses include the salary and allowances, contribution to the provident fund and gratuity fund, staff training expenses and other allowances and made for staff.

The ratio measures the proportion of income spent for the staff, whose contribution is of great significance in the success of the bank. High ratio indicates that the major portion of income is used for staff expenses. From the firm's point of view, low ratio is advantageous. But the staff prefer high ratio, as it is the result of higher level of facilitates and benefits provided to them.

Staff expenses to total income ratio
Table-4.24

| Bank | NIB |  |  | NSBIB |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | S. Exp. | T. Inc. | Ratio | S. Exp. | T. Inc. | Ratio |
| $2059 / 60$ | 61291 | 388723 | 15.77 | 33731 | 565907 | 5.96 |
| $2060 / 61$ | 89748 | 587512 | 15.28 | 32510 | 611606 | 5.32 |
| $2061 / 62$ | 97004 | 791079 | 12.26 | 37582 | 718988 | 5.23 |
| $2062 / 63$ | 120663 | 970482 | 12.43 | 50539 | 522285 | 9.68 |
| $2063 / 64$ | 145370 | 1314233 | 11.06 | 53232 | 449028 | 11.85 |
| Total | 66.80 |  | 38.03 |  |  |  |
| Mean | 13.36 |  | 7.61 |  |  |  |
| S.D. | 1.83 |  | 13.91 |  |  |  |
| C.V. | 13.74 |  | 99.85 |  |  |  |

Table 4.24


The comparative table and figure shows that the ratio of staff expenses to total income to both banks are in fluctuating trend during the period of study. The mean ratio of staff expenses to total income of NIB is considerably greater than that NSBIB, i.e. 13.36>7.61.

The CV of the ratio of NSBIB is greater than NIB, i.e. 13.91>1.83. Thus, the variability of the ratios of NIB is more consistent than NSBIB. The higher mean ratio of NIB measures the higher percentage of staff expenses in relation to total income than that of NSBIB which also reflects that NIB has been using higher percentage of income in staff expenses purpose.

### 4.1.5.7 General Expenses to Total Income Ratio:

General expenses comprise expenses incurred in house rent, water and electricity, repairs and maintenance, legal expenses, audit expanses and other miscellaneous expenses made in course of operation.

It shows the percentage of income spent for the operating activity of the bank. High ratio shows that large amount of income is spent for the operating activity of the bank. Lower ratio is favorable to the bank, as it is the reflection of operational efficiency.

General expenses to total income ratio
Table-4.25

| Bank | NIB | NSBIB |
| :---: | :---: | :---: |


| Year | G Exp | T. Inc | Ratio | G Exp | T. Inc | Ratio |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $2059 / 60$ | 108041 | 388723 | 27.79 | 77364 | 565907 | 13.67 |
| $2060 / 61$ | 149479 | 587512 | 25.44 | 82180 | 611606 | 13.44 |
| $2061 / 62$ | 182915 | 791079 | 23.12 | 90628 | 718988 | 12.60 |
| $2062 / 63$ | 190605 | 970482 | 19.64 | 99214 | 922285 | 10.76 |
| $2063 / 64$ | 243430 | 1314233 | 18.52 | 120111 | 449028 | 26.75 |
| Total | 114.52 |  | 77.22 |  |  |  |
| Mean | 22.90 |  | 15.44 |  |  |  |
| S.D. | 3.47 |  | 5.74 |  |  |  |
| C.V. | 15.15 |  | 37.19 |  |  |  |

Figure-4.25


The comparative table reveals that the ratios general expenses to total income of both banks are in fluctuating trend during the period of study. The mean ratio of office
general expenses to total income of NSBIB is greater than that of the mean ratio of NIB, i.e. $77.22>22.90$.

The coefficient of variation of the ratios of NSBIB is greater than the CV of variation of NIB, i.e. $37.19>15.15$. Thus the variability of the ratios of NIB is more homogenous than NSBIB.

### 4.1.6 Other Financial Indicators.

Above stated ratios throw light on various aspects of bank. Management, investors and creditors can get information regarding their interest. Some indicators are dealt here which provide more knowledge about the performance of the bank. They are listed below:

### 4.1.6. $\quad$ Earning Per Share (EPS).

Earning per share refers to the income available to the common shareholders on per share basis. It enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favor high EPS. It reflects the sound profitability position of the bank.

The table reveals that the EPS of these two banks have been decreased gradually. Except F/Y the EPS of NIB is greater than NSBIB. So, from the above analysis, it can conclude that EPS of NIB has better position than that of NSBIB. The mean EPS of NIB is greater than that of NSBIB. i.e, 50.54>16.69. Earning per share
Table-4.26

|  | NIB | NSBIB |
| :---: | :---: | :---: |
| $2059 / 60$ | 39.56 | 9.47 |
| $2060 / 61$ | 51.70 | 9.61 |
| $2061 / 62$ | 39.50 | 8.69 |
| $2062 / 63$ | 59.35 | 41.74 |
| $2063 / 64$ | 62.57 | 13.98 |
| Average | 50.54 | 16.69 |

### 4.1.6.2 Dividend Per Share (DPS).

The net profit after the deduction of preference dividend belongs to equity shareholders. But the income that they really receive is the amount of earning distributed as dividend. Dividend may distribute in form of cash or bonus share.

Dividend distribution affects the price of share. The shareholders prefer high dividend. But it may sometimes be wise to distribute less amount of profit if investment opportunities are available.

Dividend per share
Table-4.27

| F/Y | NIB | NSBIB |
| :---: | :---: | :---: |
| $2059 / 60$ | 8 | 20 |
| $2060 / 61$ | - | 15 |
| $2061 / 62$ | - | 12.5 |
| $2062 / 63$ | 5 | 20 |
| $2063 / 64$ | 12.59 | 5 |
| Average | 5.12 | 14.5 |

Above comparative table shows that NIB has not declared two years i.e, 2060/61, 2061/62.

The higher DPS of NSBIB signifies that the bank is more successful to win the confidence of the investor. As dividend to the investors receive the direct return and they evaluate the organization paying high dividend as the better one. This means NSBIB can sell its shares more easily than those shares of NIB.

### 4.1.6.3 Price Earning Ratio (P/E Ratio).

P/E ratio is widely used to evaluate the bank's performance as expected by investors. It represents the investors, judgment or expectation about the growth in the bank's earning.

In other word, it measures how the market is responding towards the earning performance of the concerned institution. High ratio indicates greater expectation of the marker towards the achievement of form.

Price earning ratio
Table-4.28

| F/Y | NIB | NSBIB |
| :---: | :---: | :---: |
| $2059 / 60$ | 20.10 | 22.24 |
| $2060 / 61$ | 18.18 | 21.54 |
| $2061 / 62$ | 20.25 | 25.21 |
| $2062 / 63$ | 21.23 | 33.49 |
| $2063 / 64$ | 27.63 | 29.89 |
| Average | 21.48 | 26.47 |

The table shows that the $\mathrm{P} / \mathrm{E}$ ratio of both bank are in fluctuating trend during the study period. NSBIB has higher mean P/E ratio than that of NIB i.e. 26.47>21.48.

The higher mean ratio of NSBIB reveals that the investors are well satisfied with the performance of the bank. In the other words, market has positively judged in the performance NSBIB.

### 4.1.6.4 Dividend Payout Ratio:

It measures the relationship between the earnings belonging to the ordinary shareholders and the dividend paid to them> it can be calculated by dividing the total dividend paid to the owners by the total profit/earnings available to them, of by dividing the DPS by EPS. Thus

From the table it is revealed that DPR of both banks is in fluctuation trend. In the case of NIB is increasing trend. Whereas NSBIB has not distributed dividend after 2061/62. From the shareholders aspect NIB has reflected a better scenario although it has also accumulated a higher portion of earnings on an average.

Dividend payout ratio.

Table-4.29

| F/Y | NIB | NSBIB |
| :---: | :---: | :---: |
| $2059 / 60$ | 50.56 | 84.47 |
| $2060 / 61$ | 29.01 | - |
| $2061 / 62$ | 31.65 | - |
| $2062 / 63$ | 33.70 | 12.19 |
| $2063 / 64$ | 7.99 | 90.05 |
| Average | 30.38 | 37.34 |

In fact, there is no specific rule regarding the ideal dividend payout ratio and it is a controversial issue as well. Controversy in the sense, that there are two schools of thought about its effect on NPS. So the management should maintain a trade off between paying and retaining in order to achieve shareholders' satisfaction and bank's sustainable growth.

### 4.2 Statistical tools.

### 4.2.1 Trend Analysis

Trend analysis is a mathematical method, which is widely used to find out future tendencies based on past assumptions. Furthermore, it is applied fro finding out a trend line for those series which charge periodically in absolute amount.

Hence, future value for coming five years (up to 2060/2070) have been analyzed and forecasted with the help of trend analysis. They is:
-Total deposit

## a) Least Square of Linear Trend of Total Deposit.

Total deposit of bank includes fixed deposit, saving deposit, current deposit, call and other deposit. Total deposit trend of NIB and NSBIB has been shown below:

Table; 4.30
'mill'

| NIB |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F/Y | Total Dep (Y) | Year= <br> $062 / 63(\mathrm{X}$ <br> ) | $\mathrm{X}^{2}$ | XY | $\mathrm{yc}=\mathrm{a}+\mathrm{bX}$ |
| $2059 / 60$ | 16728 | -3 | 9 | -50184 | 10133 |
| $2060 / 61$ | 22946 | -2 | 14 | -45892 | 13459 |
| $2061 / 62$ | 32122 | -1 | 1 | -32122 | 16784 |
| $2062 / 63$ | 54129 | 0 | 0 | 0 | 20109 |
| $2063 / 64$ | 75166 | 1 | 1 | 75166 | 23434 |
| $2064 / 65$ |  | 2 | 4 |  | 26760 |
| $2065 / 66$ |  | 3 | 9 |  | 30085 |
| $2066 / 67$ |  | 4 | 16 |  | 33410 |
| $2067 / 68$ |  | 5 | 25 |  | 36735 |
| $2068 / 69$ |  | 6 | 36 |  | 40061 |
| Total | $\sum Y=224095$ |  | $\sum X^{2}=105$ | $\sum X Y=105285$ |  |

Table-4.30
'mill'

| F/Y | Total Dep (Y) | Year= <br> $062 / 63(\mathrm{X}$ <br> $)$ | $\mathrm{X}^{2}$ | XY | $\mathrm{yc}=\mathrm{a}+\mathrm{bX}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2059 / 60$ | 3375 | -3 | 9 | -1000125 | 32433.5 |
| $2060 / 61$ | 33522 | -2 | 14 | -67044 | 122434.5 |
| $2061 / 62$ | 40863 | -1 | 1 | -40863 | 122436.5 |
| $2062 / 63$ | 61161 | 0 | 0 | 0 | 22409.5 |
| $2063 / 64$ | 55174 | 1 | 1 | 55174 | 22436.5 |
| $2064 / 65$ |  | 2 | 4 |  | 202463.5 |
| $2065 / 66$ |  | 3 | 9 |  | 322490.5 |
| $2066 / 67$ |  | 4 | 16 |  | 422517.5 |
| $2067 / 68$ |  | 5 | 25 |  | 522544.5 |
| $2068 / 69$ |  | 6 | 36 |  | 622571.5 |
| Total | $\sum Y=224095$ |  | $\sum X^{2}=105$ | $\sum X Y=105285$ |  |

Figure-4.26


The above table and graph illustrates the trend line of NIB and NSBIB. It shows increasing trend on both banks. The growth tend of total deposit is higher in NSBIB than in NIB. Initially, NIB has more total deposit 16728than that of NSBIB 3375 .But later on NIB bit up. Next fifth year of forecast, the total deposit of NSBIB is approximately two times of the NIB. The forecast of next five years, the trend of total deposit of NIB is $y c=40061$ and NSBIB is $y c=622571$. It is found that NSBIB is more successful to collect total deposit than NIB.

### 4.2.2. Karl Pearson's Coefficient of Correlation

## Between Total Net Profit After tax and Total Debt of NIB

Karl Pearson's coefficient of correlation is calculated to examine the relation between debt and NAPT or it is the statistical technique, which is used to measure the degree of relationship (association) between debt and profit or not.

Table4.31

| F/Y | NAPT <br> $(\mathrm{X})$ | T. <br> $\operatorname{Debt(Y)~}$ | XY | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2059 / 60$ | 3593 | 7922 | 28463746 | 12909649 | 62758084 |
| $2060 / 61$ | 5779 | 11524 | 66597196 | 33396841 | 132802576 |
| $2061 / 62$ | 9137 | 14254 | 130238798 | 83484769 | 203176516 |
| $2062 / 63$ | 459 | 18927 | 8687493 | 210681 | 358231329 |
| $2063 / 64$ | 1213 | 24488 | 29703944 | 1471369 | 599662144 |
| Total | 20181 | 77115 | 1556257815 | 131473309 | 5946723225 |
| Coefficient of correlation (r)=0.81 | Probable Error= 0.104 |  |  |  |  |

The table shows that the correlation coefficient and probable error between net profit after tax and total debt of NIB is 0.81 and 0.104 in the review period respectively. Correlation coefficient come larger than six times than the probable error, i.e. $0.81>6 \times 0.104$. It reveals that the NAPT and Total debt of the bank are highly and positive correlated. And another words correlation coefficient of NAPT and total debt is definitely significant or in other words NAPT of the bank increase almost to the same degree with increase in the amount of debt.

## Between Total Net Profit After tax and Total Debt of NSBIB

Table-4.32

| F/Y | NAPT <br> $(\mathrm{X})$ | T. <br> $\operatorname{Debt(Y)~}$ | XY | $\mathrm{X}^{2}$ | $\mathrm{Y}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2059 / 60$ | 487 | 6528 | 3179136 | 237169 | 42614784 |
| $2060 / 61$ | 608 | 7198 | 4376384 | 369664 | 51811204 |
| $2061 / 62$ | 573 | 8654 | 4958742 | 328329 | 74891716 |
| $2062 / 63$ | 1170 | 1102 | 1289340 | 1368900 | 1214404 |


| $2063 / 64$ | 2549 | 11445 | 29173305 | 6497401 | 130988025 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 5387 | 34927 | 42976907 | 8801463 | 301520133 |  |  |
| Coefficient of correlation (r)=.407 |  |  |  | Probable Error= 0.562 |  |  |  |

The table shows that the correlation coefficient and probable error between net profit after tax and total debt of NSBIB is 0.407 and 0.562 in the review period respectively. Correlation coefficient comes smaller than six times than the probable error, i.e. $0.562<6 \times 0.407$. It reveals that the NAPT and Total debt of the bank are negative correlated. And another words correlation coefficient of NAPT and total debt is not significant.

After comparison the two banks, net profit in NIB seemed to rise continuously with increase in the amount of total debt. In other words, NIB is successful to utilize the investor's fund more prudently and effectively to realize the return. Therefore NIB returns the capacity of uplifting the net profit by increasing the net assets but poor relation is found between total debt and net profit in NSBIB.

### 4.2.3 Regression Analysis.

It is the relationship between a known variable \& unknown variable to estimate the unknown one is termed as regression analysis.

Multiple regression analysis is a logical extension of the simple linear regression analysis. In it instead of a single independent variable, two or more independent variables are used to estimate the unknown values of dependent variables.

The multiple regression equation of dependent variable X 1 on two independent variables X2 \& X3 is given by:

$$
\begin{equation*}
\bar{X}=\mathrm{a} 1+\mathrm{b} 1 \mathrm{X} 2+\mathrm{b} 2 \mathrm{X} 3 . \tag{i}
\end{equation*}
$$

$$
\begin{aligned}
& \sum X 1=\mathrm{na} 1+\mathrm{b} 1 \sum X 2+\mathrm{b} 2 \sum x 3 \\
& \sum X 1 X 2=\mathrm{b} 1 \sum X 2^{2}+\mathrm{b} 2 \sum X 2 X 3 \\
& \sum X 1 X 3=\mathrm{a} 1 \sum X 3+\mathrm{b} 1 \sum X 2 X 3+\mathrm{b} 2 \sum X 3^{2}
\end{aligned}
$$

Where,
$\mathrm{X} 1=$ dependent variables $=$ Return on Equity $(\mathrm{ROE})$
X2 $=$ independent variables $=$ Return on Assets (ROA)
X3 $=$ independent variables $=$ Equity Multiplier $(E M)$

Here,

$$
\mathrm{EM}=\frac{\text { Assets }}{\text { Equity }}
$$

Calculation of ROE (X1) of Both Banks.
Table- 4.34

| NIB |  |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | NAPT | Equity | ROE | NAPT | Equity | ROE |
| $2059 / 60$ | 359361 | 638541 | 0.563 | 48748 | 569852 | 0.0855 |
| $2060 / 61$ | 577931 | 295293 | 1.957 | 60851 | 626637 | 0.0971 |
| $2061 / 62$ | 913713 | 295293 | 3.094 | 57386 | 689013 | 0.0833 |
| $2062 / 63$ | 45950 | 1415439 | 0.032 | 117001 | 982373 | 0.1191 |
| $2063 / 64$ | 121354 | 638541 | 0.19 | 254908 | 1163291 | 0.2191 |
| Total |  |  | 5.837 |  |  | 0.6042 |

Calculation of ROA (X2) of Both Banks.

Table-4.35
'000'

| NIB |  |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | NAPT | Assets. | ROA | NAPT | Assets | ROA |
|  |  |  |  |  |  |  |
| $2059 / 60$ | 359361 | 9014251 | 3.987 | 48748 | 7566326 | 0.6443 |
| $2060 / 61$ | 577931 | 13463937 | 4.292 | 60851 | 8440405 | 0.7209 |
| $2061 / 62$ | 913713 | 16390652 | 5.575 | 57386 | 10345373 | 0.5547 |
| $2062 / 63$ | 45950 | 21732081 | 0.211 | 117001 | 13035839 | 0.8975 |
| $2063 / 64$ | 121354 | 28073517 | 0.432 | 254908 | 13901200 | 1.8337 |
| Total |  | 14.5 |  |  | 4.6512 |  |

Calculation of Equity Multiplier (X3) of Both Banks.
Table-4.36
'000'

| NIB |  |  |  |  | NSBIB |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Assets. | Equity | EM | Assets | Equity | EM |  |
| $2059 / 60$ | 9014251 | 638541 | 14.12 | 7566326 | 569852 | 13.278 |  |
| $2060 / 61$ | 13463937 | 295293 | 45.6 | 8440405 | 626637 | 13.469 |  |
| $2061 / 62$ | 16390652 | 2952930 | 5.551 | 10345373 | 689013 | 15.015 |  |
| $2062 / 63$ | 21732081 | 1415439 | 15.35 | 13035839 | 982373 | 13.27 |  |
| $2063 / 64$ | 28073517 | 638541 | 43.97 | 13901200 | 1163291 | 11.95 |  |
| Total | 124.6 |  |  |  |  | 66.981 |  |

Calculation for Regression Equation (NIB) of X1 on X2 \& X3 (ROE on ROA \& EM)

Table-4.37

| Year | X1 | X2 | X3 | X1*X2 | X1*X3 | X2*X3 | X1 $^{2}$ | X2 $^{2}$ | $\mathrm{X}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2059 / 60$ | 0.563 | 3.99 | 14.1 | 2.24 | 7.95 | 56.30 | 0.32 | 15.90 | 199.37 |
| $2060 / 61$ | 1.957 | 4.29 | 45.6 | 8.40 | 89.24 | 195.72 | 3.83 | 18.42 | 2079.36 |
| $2061 / 62$ | 3.094 | 5.58 | 5.55 | 17.25 | 17.17 | 30.95 | 9.57 | 31.08 | 30.81 |
| $2062 / 63$ | 0.032 | 0.21 | 15.3 | 0.01 | 0.49 | 3.24 | 0.00 | 0.04 | 235.32 |
| $2063 / 64$ | 0.19 | 0.43 | 44 | 0.08 | 8.35 | 19.00 | 0.04 | 0.19 | 1933.36 |
| Total | 5.836 | 14.5 | 125 | 27.98 | 123.21 | 305.19 | 13.76 | 65.63 | 4478.22 |

## For NIB

$$
\begin{aligned}
& \sum X 1=\mathrm{na} 1+\mathrm{b} 1 \sum X 2+\mathrm{b} 2 \sum X 3 \\
& \sum X 1 X 2=\mathrm{a} 1 \sum X 2+\mathrm{b} 1 \sum X 2^{2}+\mathrm{b} 2 \sum X 2 X 3 \\
& \sum X 1 X 3=\mathrm{a} 1 \sum X 3+\mathrm{b} 1 \sum X 2 X 3+\mathrm{b} 2 \sum X 3^{2}
\end{aligned}
$$

Substituting the value in above three normal equations, then we get:

$$
\begin{aligned}
& 5 \mathrm{a} 1+14.5 \mathrm{~b} 1+125 \mathrm{~b} 2=5.836 \\
& 14.5 \mathrm{a} 1+56.65 \mathrm{~b} 1+305.19 \mathrm{~b} 2=27.98 \\
& 125 \mathrm{a} 1+305.19 \mathrm{~b} 1+4478.22 \mathrm{~b} 2=123.21
\end{aligned}
$$

Solving these three equations we can get the value of $\mathrm{a} 1, \mathrm{~b} 1 \& \mathrm{~b} 2$ After solving the equations, we get:

$$
\begin{array}{ll}
\mathrm{a} 1 & =-0.3021 \\
\mathrm{~b} 1 & =0.477 \\
\mathrm{~b} 2 & =0.00344
\end{array}
$$

Now, substituting these values in equation (1), we get estimated regression equation of X1 on X2 \& X3.

$$
\begin{aligned}
\bar{X} & =\mathrm{a} 1+\mathrm{b} 1 \mathrm{X} 2+\mathrm{b} 2 \mathrm{X} 3 \\
& =-3021+.477 * \mathrm{X} 2+.00344 * \mathrm{X} 3
\end{aligned}
$$

Calculation of standard error estimation of dependent variable X1 (ROE) on two independent variables X2 (ROA) and X3 (EM) is given by

$$
\begin{aligned}
\mathbb{đ}_{1.23}=\mathrm{S}_{1.23} & =\sqrt{\sum X 1^{2}-a 1 \sum X 1-b 1 \sum X 1 X 2-b 2 \sum X 2 X 3} \\
& =\sqrt{0.13 .76-(-.3021 * 58.36)-(0 . .477 * 27.98)-(0.00344 * 305.19)} \\
& =1.836
\end{aligned}
$$

## For NSBIB

Calculation for Regression Equation (NSBIB) of X1 on X2 \& X3 (ROE on ROA \&
EM)
Table:4.38

| Year | X1 | X2 | X3 | $\mathrm{X} 1 * \mathrm{X} 2$ | $\mathrm{X} 1 * \mathrm{X} 3$ | $\mathrm{X} 2 * \mathrm{X} 3$ | $\mathrm{X}^{2}$ | $\mathrm{X}^{2}$ | $\mathrm{X}^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2055 / 56$ | 0.09 | 0.64 | 13.28 | 0.06 | 1.20 | 8.50 | 0.01 | 0.41 | 176.36 |
| $2056 / 57$ | 0.10 | 0.72 | 13.47 | 0.07 | 1.35 | 9.70 | 0.01 | 0.52 | 181.44 |
| $2057 / 58$ | 0.08 | 0.55 | 15.01 | 0.04 | 1.20 | 8.26 | 0.01 | 0.30 | 225.30 |
| $2058 / 59$ | 0.12 | 0.90 | 13.27 | 0.11 | 1.59 | 11.94 | 0.01 | 0.81 | 176.09 |
| $2059 / 60$ | 0.22 | 1.83 | 11.95 | 0.40 | 2.63 | 21.87 | 0.05 | 3.35 | 142.80 |
| Total | 0.61 | 4.64 | 66.98 | 0.68 | 7.96 | 60.26 | 0.09 | 5.39 | 901.99 |

$$
\begin{aligned}
& \sum X 1=\mathrm{na} 1+\mathrm{b} 1 \sum X 2+\mathrm{b} 2 \sum X 3 \\
& \sum X 1 X 2=\mathrm{a} 1 \sum X 2+\mathrm{b} 1 \sum X 2^{2}+\mathrm{b} 2 \sum X 2 X 3 \\
& \sum X 1 X 3=\mathrm{a} 1 \sum X 3+\mathrm{b} 1 \sum X 2 X 3+\mathrm{b} 2 \sum X 3^{2}
\end{aligned}
$$

Substituting the value in above three normal equations, then we get:
$5 \mathrm{a} 1+4.64 \mathrm{~b} 1+66.98 \mathrm{~b} 2=.61$
$14.64 \mathrm{a} 1+5.39 \mathrm{~b} 1+60.26 \mathrm{~b} 2=.68$
$66.98 \mathrm{a} 1+60.26 \mathrm{~b} 1+901.99 \mathrm{~b} 2=7.96$
Solving these three equations we can get the value of $\mathrm{a} 1, \mathrm{~b} 1 \& \mathrm{~b} 2$
After solving the equations, we get:
a1 $=-.1057$
b1 $=0.12025$
$\mathrm{b} 2=0.0086$

Now, substituting these values in equation (1), we get estimated regression equation of X 1 on X 2 \& X 3 .

$$
\begin{aligned}
\bar{X} & =\mathrm{a} 1+\mathrm{b} 1 \mathrm{X} 2+\mathrm{b} 2 \mathrm{X} 3 \\
& =-0.1057+0.12025 \mathrm{X} 2+0.0086 \mathrm{X} 3
\end{aligned}
$$

Calculation of standard error estimation of dependent variable X1 (ROE) on two independent variables X 2 (ROA) and X 3 (EM) is given by

$$
\begin{aligned}
\mathrm{d}_{1.23}=\mathrm{S}_{1.23} & =\sqrt{\sum X 1^{2}-a 1 \sum X 1-b 1 \sum X 1 X 2-b 2 \sum X 2 X 3} \\
& =\sqrt{0.09-(-0.1057 * 0.61)-(0.12025 * 0.68)-(0.0086 * 60.26)} \\
& =.6675
\end{aligned}
$$

From the above regression analysis, standard error of dependent variable ROE on two independent variables ROA and EM seems greater in NIB than NSBIB, which is 1.836 in NIB and . 667 in NSBIB. It shows NSBIB showed lesser error than NIB.

## CHAPTER-V

## SUMMARY CONCLUSION \& RECOMMENDATIONS

From the starting of thesis writing, we have described the introduction part, review of literature, research methodology and presentation and analysis of data. In this conclusion section, a summary, and some prescribed recommendation have been mention forwarded in order to reforms and implement the new policies and programs for selected joint venture banks along with the conclusion derived form the study are highlighted in order to uplift the country form the present country and present violence, in order to make the country fully developed.

## SUMMARY

The thesis entitle 'A comparative study on financial performance analysis of NIB and NSBIB' is carried on to fulfill the partial requirement for the degree of MBS. Due to the different limitation and problems, the thesis has chosen just two JVB's the study has covered fiscal year till 2060/64. I have concerned and review related book journal, relevant thesis, article and annual report. For analysis this financial data of the sampled banks, the financial tools such as ratio analysis, i.e. profitability ratio, liquidity ratio, activity ratio, capital adequacy ratio, leverage ratio and other invisibility ratio. And in statistical analysis, i.e. correlation coefficient analysis, mean, SD, CV, trend analysis.

We have also analysis the data with hypothetically, i.e. t- test and f- ratio. Hypothesis test covered null hypothesis have been formulated in the form, there is no significant difference between financial performance of NIB and NSBIB.

From the above analysis following findings reveal:

1. A liquidity ratios shows that the liquidity position of NSBIB is better than NIB. NSBIB has comparatively sufficient level of current assets, cash and bank balance and fixed deposit than that of NIB.
a) Current ratio of the both banks seemed slightly fluctuating trends. We have found that there is not applied the conventional standard of 2:1 but ratio the both banks has not fall below than 1:1. Average current ratio seemed higher in NSBIB, which signifies that the bank is more strong and capable to meet short term solvency. Lower CV of the NIB found more consistent in the variability of the ratio. Hypothesis test reveals the mean ratio of the two sampled banks do not differ significant.
b) Cash and bank balance to total deposit ratio shows that there is fluctuating trends in both bank during the study period. However the average ratio of NSBIB seemed higher than that of NIB which signifies that the solvency position of NSBIB found better than that of NIB. NSBIB found less successful to utilize the fund of total deposit that may automatically affect the operating profit. The ratio of NIB is more homogenous than the NSBIB.
c) NRB Balance to current and saving deposit ratio is also fluctuating trends in both banks. But both banks have maintained the NRB's required ratio, i.e, $8 \%$. The average ratio of NSBIB is higher than NIB, which signified the solvency position of NSBIB found better than NIB.
2. The analysis of leverage ratios of both banks, NSBIB is capable to use debts is better than NIB in terms of total debt to total equity and debt to total capital ratio. It signifies NSBIB seemed more leveraged than NIB. In other words NSBIB is utilizing more debt for benefit of its shareholders. But in terms of debt to total assets and interest coverage ratio NIB is higher than NSBIB. Hypothesis reveals that both sampled banks do not differ significant.
3. The capital adequacy ratio is fluctuating trends. The analysis of capital adequacy ratios of both banks has clearly showed that shareholder fund with respect to net worth to total deposit, total assets and total capital ratio are higher in NIB than that of NSBIB. This signifies that the NIB is superior to impress and attract the investor and shareholders more than NSBIB. The ratio remained more consistent in NIB. Hypothesis test reveals that the mean ratios of two banks do not differ significant.
4. The turnover ratio/ activity ratios of both bank seemed fluctuating trends. From the analysis of turnover ratio, NSBIB has better turnover in terms of loan and advance to total deposit, saving deposit, total assets and income generating assets to total dept ratio. Which signifies that the NSBIB is more successful to utilize it collected funds in profitable sector.

But in terms of loan and advance to fixed deposit, investment to total debt, income generating assets to total assets ratios of NIB is more than NSBIB. And CV of loan and advance to total deposit ratio and saving deposit ratio of NIB (is less than NSBIB) is more consistent. Hypothesis test of the banks is highly significant.
5. Profitability ratio is also fluctuating trends during the study period. From the analysis of profitability ratio of both banks, it is found that profitability position of NIB is better than NSBIB in terms of return to total assets, net worth, total deposit, interest earned to total assets, staff expenses and general expenses to total income ratio. It reflects that NIB is more capable to utilize the fund to productive sector than NSBIB.

But the interest expenses to total income ratio is more in NSBIB than NIB. It reveals NSBIB pays more interest than NIB. The hypothesis test is not also significant of two banks.
6. Earnings per share of NIB are more than NSBIB, which signifies the positive and favorable result of the NIB. It shows the good day of NIB and normal day of NSBIB.
7. The average of DPS seemed higher in NIB, which reveals the strong profitability position of the NIB. But NSBIB seemed poor profitability earning position. It has not distributed as dividend 2061/62.
8. Trend analysis of net worth of NIB is increasing trend. It shows net worth will highly increase for the coming five years.
9. Correlation coefficient analysis consist the total net profit after tax and total debt, net profit and total assets and net profit after tax and income generating assets of both banks.

Total net profit after tax and total debt: Correlation coefficient of NIB is greater than six times of probable error that reveals net profit and debt of the bank is highly and positive correlated. It seems that net profit of the bank increase almost to the same degree with increase in the amount of debt.

In another hand, correlation coefficient of NSBIB is less than six times of probable error that reveals net profit and debt of the bank is negative correlated.

Total net profit after tax and total assets: Correlation coefficient of NIB is greater than six times of probable error that reveals net profit and total assets of the bank is highly and positive correlated. It seems that net profit of the bank increase almost to the same degree with increase in the amount of assets.

Correlation coefficient of NSBIB is less than six times of probable error that reveals net profit and assets of the bank is negative correlated. Profit can not increase as the same ratio of increasing assets.

Total net profit after tax and total income generating assets: Correlation coefficient of NIB is greater than six times of probable error that reveals net profit and total income generating assets of the bank is highly and positive correlated. It seems that net profit of the bank increase almost to the same degree with increase in the amount of assets.

Correlation coefficient of NSBIB is less than six times of probable error that reveals net profit and income generating assets of the bank is negative correlated.

Profit can not increase as the same ratio of increasing assets. Thus the study finds how much the NIB increase amount on debt, assets and income generating assets, the profit increases the same degree. But it may not apply on NSBIB.
10. Regression analysis, standard error of dependent variable ROE on two independent variables ROA and EM seems greater in NIB than NSBIB, which is 1.836 in NIB and .6675 in NSBIB. It shows NSBIB showed lesser error than NIB.

## CONCLUSIONS

Liquidity positions of the sampled banks seemed satisfactory with comparison each other. We have found liquidity position of NSBIB is better than NIB. NSBIB has comparatively sufficient level of current assets, cash and bank balance and fixed deposit than that of NIB. It seems that the NSBIB can meet to pay its short term solvency or current obligation more than the NIB.

Both banks used higher proportion of the debt in their capital structure overall capital structure. But NSBIB is capable to use debts is better than NIB in terms of total debt to total equity and debt to total capital ratio. It signifies NSBIB seemed more leveraged than NIB. In other words NSBIB is utilizing more debt for benefit of its shareholders. But in terms of debt to total assets and interest coverage ratio NIB is higher than NSBIB.

About the capital adequacy position of NIB is superior to impress and attract the investor and shareholders more than NSBIB. The ratio remained more consistent in NIB. Hypothesis test reveals that the mean ratios of two banks do not differ significant.

Turnover/ Activity ratios of NSBIB has better turnover in terms of loan and advance to total deposit, saving deposit, total assets and income generating assets to total dept ratio. Which signifies that the NSBIB is more successful to utilize it collected funds in profitable sector.

But in terms of loan and advance to fixed deposit, investment to total debt, income generating assets to total assets ratios of NIB is more than NSBIB. And CV of loan and advance to total deposit ratio and saving deposit ratio of NIB (is less than NSBIB) is more consistent.

Profitability position is seemed strong and satisfied in NIB is better than NSBIB in terms of return to total assets, net worth, total deposit, interest earned to total assets, staff expenses and general expenses to total income ratio. So we have found that the NIB is superior and strong than NSBIB, because of well and strong management and well utilization of funds in less risky and more profitable sector.

But the interest expenses to total income ratio is more in NSBIB than NIB. It reveals, NSBIB pays more interest than NIB.

Earnings per share of NIB are more than NSBIB, which signifies the positive and favorable result of the NIB. Again, NSBIB seems rising trends of EPS after $3{ }^{\text {rd }}$ year and decreasing trend in NIB. It shows the good day of NSBIB and bad day of NIB.

The average of DPS seemed higher in NIB, which reveals the strong profitability position of the NIB. But NSBIB seemed poor profitability earning position. It has not distributed as dividend after 2061/62.

Hypothesis test reveals that most of the ratio of two banks, there is not significant. In another words performance of the sample banks is almost similar. But in portability ratio, there is significant difference in test hypothesis.

Trend analysis of net worth of NIB is increasing trend. It shows net worth will highly increase for the coming five years. But trend line of loan and advance, investment, net profit after tax of NSBIB is highly increasing. Thus the financial increasing trend of NSBIB is more satisfactory than NIB.

Correlation coefficient analysis consist the total net profit after tax and total debt, net profit and total assets and net profit after tax and income generating assets. This reveals that correlation coefficient of NIB is greater than six times of probable error that reveals net profit and debt of the bank, total assets and income generating assets is highly and positive correlated. It seems that net profit of the bank increase almost to the same degree with increase in the amount of debt, assets and income generating assets.

In another hand, correlation coefficient of NSBIB is less than six times of probable error that reveals net profit and debt, assets and income generating assets is negative correlated. We can say profit can not increase as the same ratio of increasing debt and assets.

Regression analysis, standard error of dependent variable ROE on two independent variables ROA and EM seems greater in NIB than NSBIB, which is 1.836 in NIB and .6675in NSBIB. It shows NIB showed lesser error than NSBIB.

## RECOMMENDATIONS

The findings of the study reflect both positive and negative results with respect to the financial performance of the sampled banks. But the recommendations have been presented for the improvement of the negative positions of the banks.
i) Since the current ratio of both the banks are not satisfactory and below the standard level of $2: 1$. Both the banks are suggested to maintain standard current ratio.
ii) NRB balance to deposit ratio of both banks have maintained higher than the standard prescribed by NRB. i.e. $8 \%$. So the surplus amount of fund in NRB cannot generate any income. So both the bank is suggested to invest the surplus fund in other current assets.
iii) It is suggested to NSBIB to search for the profitable sector for investment and utilization of cash and bank balance. It is higher ratio of cash and bank balance to current and saving ratio and total deposit ratio. The bank has also high amount of fixed deposit to total deposit ratio. So the bank must search profitable sector for investing.
iv) The ratio of debt to total capital ratio of both banks are in high position. Therefore, both banks should be aware of the possible risk due to the higher claim of creditor in total capital.
v) The position of capital adequacy of NSBIB is less satisfactory than NIB. So it is suggested to NSBIB to raise its shareholders equity by providing stock dividend rather than cash dividend.
vi) Turnover of NIB seems less satisfactory in terms of loan and advance to total deposit, saving deposit, total assets and income generating assets to debt. And NSBIB has less satisfactory in terms of loan and advance to fixed deposit, investment of total debt and income generating assets to total assets. It is suggested to both bank to invest its fund in high profit generating sector and expand is activities in city area rather than rural area.
vii) Staff and general expense holds major proportion of income NIB. So it is suggested to the bank to minimize it expenses taking action of remedial measures.
viii) Variance with respect to different ratios has been found fluctuating and it does not express the favorable situation. It may harm various aspects of the bank. Therefore, both of the banks are advised to keep more uniformity in ratios.
ix) Profitability position of NSBIB is much weaker than NIB but it is not in almost satisfactory level to avoid the poor profitability pattern. Therefore NSBIB is suggested to improve overall efficiency by investing assets in more
returnable sector, i.e. risky area after the proper risk analysis and utilizing the shareholders fund. Expenses on the office operation should be decreased by withdrawing unnecessary expenses and maximum utilizing the manpower.
x) Both the bank has been facing competition form other established joint venture, commercial bank, finance companies. So the banks are suggested to improve their capacity by:
$\rightarrow$ Improving effective organization structure.
$\rightarrow$ Maintaining and motivating the employees.
$\rightarrow$ Introducing latest and modern technology.
$\rightarrow$ Providing qualitative services to their customers.
$\rightarrow$ Maintaining good public relation.
$\rightarrow$ Involving and performing the social responsibilities.
$\rightarrow$ Controlling capital structure.

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