## Chapter - 1

## INTR ODUCTION

## A. GENERAL BACKGROUND

Development of a country is linked with the economic development of that country. Economic development is connected with banking system. Without economic development there is no possibility of rising the living standard of the people of that nation. A great amount of capital needs to be utilized for the economic development. It is possible to utilize a great amount of capital only with the medium of banks. So, it can be said that the banking system is a lifeline of a nation and the people of that nation.

Generally, an institution established by law which deals with money \& credits is called bank. A bank simply carries out the work of exchange money, providing loan, accepting deposit and transferring the money. Role of banks primarily consists of the utilization of deposits and providing credit. In other words banks in such countries like Nepal have very important role to play in accumulating scattered resources and diverting such resources into productive channels. They pull all the scattered savings that are idle or otherwise would have been wasted in unproductive consumption like marriage, gambling, festivals, social economic activities etc. and they channel them in productive investment or the other. Most of the developing countries suffer from almost complete lack of capital market, banks and non-banking financial institutions consequently have a special role to play in the long process of growth. In principle they should undertake the responsibility for activating the increasing flow of personal savings so that the amount of hoarded wealth is diverted from unproductive to productive uses.

That means, a well managed banking system creates and mobilizes a great amount of capital which is extremely necessary for the healthy and prompt progress of a country. Moreover, an efficient banking system plays a vital role for the development of competent financial markets, industries \& merchandise, which eventually benefits all members of economy and leads for saving-investment and hence overall economic growth. In short, for rapid development of the country, banking activities must be entered into every nooks and corners of the economy.

The growth of banking system is much more essential for the developing countries like Nepal, where the economic growth is lagging behind. But unfortunately, the growth of banks in Nepal is not happened as expected. The institutional development in banking system of Nepal is far behind in comparison with other developing or developed countries. Nepal had to wait for a long time to come to this present banking system.

As far as banking functions like lending and borrowing are concerned, such activities were conducted even in ancient days. History of lending and borrowing can be traced back to the period of Lichhbi king Guanakamdev who had borrowed money from rich people to build the city of Kathmandu in 780 B.S.. Later on, the famous Malla king Jayasthiti Malla, who had ruled this country in $11^{\text {th }}$ century divided people in 64 castes on the basis of their profession. Among 64 castes, there were merchants by name "Tankadhari" who used to perform lending and borrowing function. During the prime minister ship of Ranodip Singh around 1933 B.S. a number of economic \& financial reforms were introduced. The establishment of "Tejarath Adda" was the outcome of the reform. It used to provide loans to the government officials and the people against deposit of gold \& silver. It had also extended its branches outside Kathmandu valley for granting loan. But this office had no right to accept deposit of public and had no characteristics of modern banks. Nevertheless, we can say that the institutional
banking system had started from then. However, the installation of "Kaushi Tosha Khana" as a banking agency during the reign of King Prithivi Narayan Shah could also claim to be regarded as the first step towards initiating banking development in Nepal. After having concluded a treaty with British India in 1980 B.S., Nepal could trade overseas freely for the diversification of trade. As a result, in 1993 B.S. the draft of the company act and banking act were prepared by forming industrial council. "Biratnagar Jute Mill" was established in Biratnagar under this act and both commercial and industrial development as well as institutional banking system had been started together at a time in Nepal.

The initiation of formal banking system in Nepal commenced with the establishment of Nepal Bank Limited (NBL) in 1994 B.S., the first Nepalese commercial bank. At the time of establishment this bank was also given some rights of central bank. But with the change of time it was realized to establish a separate central bank. Hence, the country's central bank, Nepal Rastra Bank (NRB) was setup in 2013 B.S.. Due to growing need of national economy, only one commercial bank could not fulfill the demand. Therefore, necessity of another commercial bank was realized. As a result Rastriya Banijya Bank (NBB) was established in 2022 B.S. as government undertaking. Objective of this bank was to bring the pace on development of overall sector of industry, commerce and trade.

The process of development of banking system in Nepal was not satisfactory up to year 2040 B.S., no other commercial banks were established during this period except extending the branches of the existing banks. So, during this period Nepal was studying and searching what shorts of programs, policies, laws and regulations should be brought into practice for the development of financial sector. And for the solution of the problem, government of Nepal adopted the policy of liberalization \& globalization. The door of banking sector was opened to the private sector and even foreign investment was allowed. As consequence of the step taken by the government the third commercial bank in Nepal or the first foreign joint venture bank was setup as Nepal Arab Bank Limited (now called as NABIL Bank Ltd.) in 2041 B.S. The inception of the bank proved to be a milestone in history of banking. It gave new ray of hope to the sluggish financial sector. One year after commencement of Nepal Arab Bank Ltd. second bank established under joint investment was Nepal Indosuez Bank Ltd. (Presently renamed as Nepal Investment Bank Ltd.) and after establishment of Nepal Indosuez Bank Ltd., Nepal Grindlays Bank Ltd. (Presently renamed as Standard Chartered Bank Nepal Ltd.) was founded. These three banks were only the joint venture banks operating in Nepal until the establishment of Himilayan Bank Ltd. in 2049 B.S. "At present, there are 25 commercial banks, 57 development banks (including 5 rural development banks), 78 finance companies operating across the country. Additionally, 19 co-operatives and around 4 dozen NGO's are involved in microfinance activities. A few more development banks and finance companies may come into operation" (NRB: 2008).

Among the various commercial banks mentioned above, here, only three banks namely NABIL Bank Ltd. (NABIL), Nepal Investment Bank Ltd. (NIBL) \& Himalayan Bank Ltd. (HBL) are selected in this present research work. Let, briefly introduce these selected banks.

NABIL Bank Limited was established in $29^{\text {th }}$ Ashad, 2041 B.S. under the Commercial Bank Act 2031 and Company Act 2021. It is the first foreign joint venture bank of Nepal established with a Technical Service Agreement and 50\% shares of Dubai Bank Limited (Acquired in 2042 B.S. by Emirates Bank International Limited, Dubai). After acquiring $50 \%$ shares of NABIL in Baisakh 2051 B.S. by National Bank of Bangladesh, NABIL was operating under the management of National Bank of Bangladesh. At present, it is now fully under Nepali management.Out of its total shares $50 \%$ shares are owned by N.B.

International Ltd. (Ireland) and remaining $50 \%$ shares are owned by local ownership. NABIL's head office is situated at Kamaladi, Kathmandu and has twenty-seven branches operating across the country. NABIL has authorized capital of Rs. 500 million, issued capital of Rs. 491.65 million and paid up capital of Rs. 491.65 million.

Nepal Investment Bank Limited (NIBL) previously known as Nepal Indosuez Bank Ltd. was established in $6^{\text {th }}$ Magh, 2042 B.S. as a second joint venture bank. Joint venture was between Nepalese and French partner (Credit Agricole Indosuez, France). During the launch period, share contributed by Credit Agricole Indosuez, France and Nepalese promoters were $50 \%$ each. Initially Banque Indosuez, Paris manages the bank. However, presently it is owned and managed by Nepalese investors only. NIBL's head office is located at Durbar Marg, Kathmandu and has nineteen branches operating across the country. NIBL has authorized capital of Rs. 1,000 million, issued capital of Rs. 590.58 million and paid up capital of Rs. 587.73 million.

Himalayan Bank Limited (HBL) was incorporated in $1^{\text {st }}$ Magh, 2049 B.S. under the Commercial Bank Act 2031 and the Companies Act 2021. It is the fourth JVBs of Nepal. Joint venture was between Nepalese promoters and Habib Bank Ltd (Pakistan). At present, out of total equity shares $80 \%$ shares are owned by Nepalese promoters and remaining $20 \%$ are owned by Habib Bank Ltd. (Pakistan). Its head office is situated at Thamel, Kathmandu and has twenty branches operating across the country.

HBL has authorized capital of Rs. 1,000 million, issued capital of Rs. 650 million and paid up capital of Rs. 643.5 million.

Presently, commercial banks are facing enormous competition among each other. They are modernizing their operations and moving towards providing a range of financial products and services in an innovative way. In other words, banks are trying to make their own separate identity in the market by formulating a special strategy. In this context, it is necessary to get knowledge whether the banks are competent and well managed or not. The best way to get that is to evaluate their financial soundness. A sound financial performance is important for the growth of business enterprise and financial institution.

## B. FOCUS OF THE STUDY

A research work is the process of a systematic and in-depth study or search of any particular subject or area. An immense research work can be done in any topic or area of the universe. But it is difficult and irrelevant to conduct a research work concentrating on different topic or subject at once. So, in this study an attempt will be made only to identify the financial weakness \& strength of three selected commercial banks viz. NABIL, NIBL \& HBL. The main focus of the study is to analyze the comparative financial performance of these banks for the period of 2060/61 to 2064/65. While making a comparative financial performance of three selected banks, a single research work cannot concentrate on all aspects such as human resource management, marketing management, labour management etc. Because of its wider area, a single research work cannot cover all these dimensions. Hence, these dimensions are out of the frame of the study. The researcher confines the work on financial performance sector only.

A financial performance of a company refers to the financial soundness of the company which means how financially strong or weak is the company. "Financial performance analysis is the process of analyzing various items of financial statements of a firm to ensure its comparative strengths \& weakness" (Rana, Surya, 2000:17). In common parlance, profit is regarded as the best criteria of measuring financial performance. Though this is the best criteria, but not the sole criteria of measuring financial performance, a financial performance of a company also refers to its earning capacity,
capability of generating capital funds, mobilization of its capital funds, proper utilization of its economic resources etc. Therefore, in this study, an attempt will be made to get knowledge about how the funds are raised? how they are mobilized? what is the earning capacity of these banks? how the overall physical facilities are being utilized so as to generate revenue? how proficiently these banks are exploiting their funds? etc.

For the purpose of this study, evaluation of the banks is made with respects to their liquidity, activity, profitability, income \& expenditure structure etc. Besides this, the study tries to find out the correlation between specific variables and causes leading to better performance of the banks. Similarly, an attempt is made to analyze the growth trend of some major variables such as deposit, net worth, investment, interest earning, net profit etc. during the study period of these three selected banks. The study also involves in conclusion and suggestion on the specific subject matter.

## C. STATEMENT OF THE PROBLEM

The open and liberal economic policy adopted by government led towards the establishment of many commercial banks in Nepal. NABIL, NIBL \& HBL are the out come of same policy too. It has been seen that there are lots of similarities between these banks. For instance, these banks were established more or less during the same period as a joint venture bank, they were established almost with an equal capital, they have been operating under the same condition \& environment, organization structure of these banks also does not differ much etc. In spite of all these similarities, the performance of these banks has been found inconsistent and different. The profitability, growth, earning capacity etc. of these banks differs among each other. Organizations established at the same period with equal capital, operating in the same environment, having similar organization structure have different financial performance. Why did this happen? There must be some reasons behind the difference in performance. Therefore, the problem of the study is ultimately to find out the reasons behind the difference in financial performance of these there concerned banks. This study aims to find out financial strength \& weakness of NABIL, NIBL \& HBL. In this connection, this research work attempts to enquire into various aspects of these banks relating to their various activities.

Cash is the most liquid fund and it is considered as the defense of the bank. The bank should maintain certain amount of cash in order to meet its cash requirements of the depositors. NRB has directed to commercial banks to maintain certain percentage of deposits as cash and bank balance for the purpose of maintaining liquidity. Here, an attempt will be made whether these banks (i.e. NABIL, NIBL \& HBL) are maintaining liquidity position or not. For this purpose cash and bank balance maintained by these banks and cash and bank balance required to maintain according to NRB directives will be analyzed.

Bank can generate funds from various sources such as deposits, loans, borrowings \& net worth. Among them deposits and net worth are the main sources of fund. Deposits denote the outsider fund whereas net worth denotes shareholder's fund. This study attempts to analyze whether these three banks are similar as regards the proportion of net worth and total deposits.

Deposits received by bank from its valuable depositors, constitutes the major portion of the bank's working capital. The growth of the banks depends primarily upon the growth of its deposits. Banks maintain different types of deposit account such as fixed, saving, current, call \& short and others. Deposits collected under fixed account can be used for granting long term loan, saving deposit can be mobilized for medium and short term loan whereas some of the current deposit can be used to finance very short term loan.

But it would be risky to utilize the funds collected under current account. Here, the researcher is going to compare the proportion of various types of deposit to total deposit of concerned banks.

Similarly, bank should invest its funds in less risky with higher productive sector. In this study investment refers to loans, cash credit \& overdraft, bills purchase and discount, investment in government's securities and other investment. The investment policy of a bank is highly influenced by the nature of funds available for its investment. So an analysis will be made whether investment pattern is as per directed by deposit pattern or not.

Excess of income over expenditure is called profit. Profit is essential for a firm's survival and future growth. In short term profit can be ignored but in long term there is no any replacement of profit for an organization. That is why it is called a blood or fuel of a business organization for its successful operation. Generally, an organization which earns more profit is regarded as successful one. But sometimes the volume of profit does not give the clear picture of an organization until it is connected with some major factors. Here an attempt is made to analyze the capacity of return/profit of these banks in relation to different major factors such as deposits, net worth, investment and earning per share (EPS).

Apart from above, there are some other financial indicators which throw light on various financial aspects of the bank. Analysis of these indicators will be very useful in order to assess the financial strength and weakness of the bank. Here the researcher aims to analyze some of the financial indicators such as operating expenses to net interest, interest paid to interest earned, total interest earned to total investment, price earning ratio, market value to book value etc. in order to assess the financial soundness of NABIL, NIBL \& HBL.

A bank is a commercial organization and it needs regular sources of income for its survival and long term growth. The main sources of income of commercial banks are interest, commission, discount, foreign exchange etc. In the process of generating income, an organization needs to incur expenses as well. The major heads of expenses are interest paid, salary, maintenance, rent, office expenses etc. A successful bank is that which has various sources of income and the sources which are consistent. Similarly, a bank said to be successful which has less amount of expenditure. Hence, an income \& expenditure analysis will be made to evaluate the income and expenditure pattern of these three concerned banks.

The major function of a bank is to collect deposits from various sources and to invest such deposits into different productive sectors. In this connection, if bank collects more deposits bank will be able to invest it on more productive sectors where as if bank fails to collect enough deposits bank will be unable to invest on those productive sectors. That means volume of investment fluctuates with the volume of deposit collected. Similarly, if deposit is increased bank has to pay more interest to its depositors and vice versa. In the same way, if investment increased bank can earn more interest and vice versa. That means volume of interest paid and interest earned fluctuates with the volume of deposits and investment respectively. In other words, it can be said that interest paid and interest earned are positively related. There are other similar variables that are related to each other. They may relate to each other positively or negatively thus it would be relevant to know whether the degree or relationship between these variables of the selected bank is similar or not.

While operating a business organization there may be different kind of change in the position of organization. Change may take place as regard net worth, deposit collection, investment, income generation, expenditure etc. In this research work it would be relevant to analyze the direction as well as magnitude of such change that has taken place during the study period. This research work attempts to know whether the change
pattern or direction of changes as regards various trends of the concerned banks is identical or not.

## D. OBJ ECTIVES OF THE STUDY

The basic objective of this study is to make comparative analysis of financial performance of three selected banks namely NABIL, NIBL \& HBL and to recommend suggestion for the improvement of state of affairs. Especially following are the specific objectives of the study.

1. To make comparative analysis of liquidity position of these three selected banks.
2. To compare deposit utilization capacity of the selected banks with reference to
a. Total deposit
b. Deposit (excluding fixed deposit)
c. Current deposit
3. To make a comparison as regards various activities such as
a. Fund structure
b. Deposit structure
c. Investment structure etc.
4. To make comparative analysis of profitability with reference to
a. Return on net worth
b. Return on total deposit
c. Return on total investment
d. Earning per share (EPS)
5. To analyze some of the relevant financial indicators such as
a. Operating expenses to net interest
b. Interest paid to interest earned
c. Total interest earned to total investment
d. Price earning ratio
e. Market value to book value
6. To evaluate the income and expenditure pattern of these selected banks.
7. To calculated the degree of correlation between the following relevant variables.
a. Total deposit and Total investment.
b. Interest earned and Interest paid.
c. Interest earned and Operating profit.
8. To compare the growth trend of bank as regards to
a. Deposit
b. Net worth
c. Investment
d. Operating income
e. Total expenses
f. Net profit
g. Interest earning
9. To provide suggestions and recommendations to overcome the problem and for the improvement of future performance.

## E. SIGNIFICANCE OF THE STUDY

The comparative study of financial performance of NABIL, NIBL \& HBL is an attempt to identify the financial weakness and strength of three concerned commercial banks. The evaluation will be made with different angles and such evaluation is expected to provide various relevant indications of an ongoing organization. Likewise, the present study is devoted to provide significant conclusion and recommendation.

So, this study is expected to be useful to various concerned persons or groups, which are mentioned as follows.
i) To the management: The management runs an organization. By management we mean higher-level executives and board of directors. Analysis of the past performance enables them to perform efficiently or effectively in the future. Or, analysis of historical data is the guideline for the future operation. So this study is expected to provide some valuable information to the management on the basis of which management can correct their weakness and fulfill the gaps.
ii) To the shareholders: Shareholders are the real owners of an organization. They do not take part in the day to day business of the organization. They meet just once in a year in general meeting. So, they want to know what is the financial position of their organization, how efficiently their organization is performing. Thus this study is expected to provide some valuable information to the shareholders.
iii) To the outsider: Outsider refers to that group who are connected with bank directly or indirectly such as depositors, creditors, potential investors, personnel of the concerned banks, stock brokers etc. The success and failure of an organization surely affects them. So, they are interested in the performance of these banks for their own behalf accordingly. Thus, this study helps them providing analysis of past performance.
iv) To the policy makers: Policy maker is those authorities who formulate and determine rules regulations and policies regarding commercial banking operations such as, official of government, concerned ministry, central bank, security exchange board etc. They should know the actual position of banking sector to make appropriate business policy in future and to take necessary steps for the improvement of this sector. In this regard, this study is expected to help them by providing some valuable information.
v) To the researchers: This study is also expected to help students, teachers and to the other researchers who are seeking to get knowledge of relating sector for their further study.

## F. LIMITATIONS OF THE STUDY

Each and every study has its own limitations which weaken the generalization. No study can be free from constraints, such as economic resources, time period etc. This study too is not exception. Following are some limitations of this study.

1. The study is done with the academic activities and also completed within the time frame of academic session. So the study is confined in the boundaries of limited time.
2. This study is limited to the comparative study of three commercial banks only i.e. NABIL, NIBL \& HBL.
3. This study covers only five year period i.e. from 2060/61 to 2064/65 .
4. The study is based on the secondary data like annual reports of sample banks, journals, unpublished as well as published thesis work and other published articles and reports. So the accuracy depends on the reliability of these secondary data.
5. The overall financial performance has been measured on the basis of limited tools and techniques of financial management \& statistics.
6. The data available in the internet websites and published annual report is assumed to be correct \& true.
7. Due to the unavailability of the latest data the study has a limited significance from the practical viewpoint.

## G. ORGANIZATION OF THE STUDY

The study is divided into five chapters and they include different topics related with the chapter. The titles of each to these chapters are listed below.

Chapter 1: Introduction of the study
Chapter 2: Review of Literature
Chapter 3: Research Methodology
Chapter 4: Presentation and Analysis of Data
Chapter 5: Summary, Conclusion and Recommendation
Chapter 1: This is the introduction chapter of the study. This chapter includes the general background of the study, focus of the study, statement of the problem, objectives of the study, significance of the study, limitation of the study, research design and organization of the study.

Chapter 2: Second chapter includes conceptual review of the related area, review of past studies and review of research tools \& techniques.

Chapter 3: This chapter deals with research methodology, which is used to evaluate the financial performance of NABIL, NIBL \& HBL. It consists of research design, population and sample, nature \& source of data, period covered, data collection and processing techniques and method of analysis.

Chapter 4: This chapter is a main part of this study. In this chapter all the data collected for the purpose of analysis are presented, analyzed and interpreted by using various tools \& techniques of finance and statistics.

Chapter 5: The last chapter is concerned with the summary of the study, conclusion of the study and various suggestions and recommendations for the improvement of the future performance. Bibliography and appendices are at the end of the study.

## Chapter - 2

## REVIEW OF LITERATURE

This chapter deals with the review of literature to make the basic knowledge for the study. Review of literature means reviewing research studies or other relevant propositions in the related area of the study so that all the past studies, their conclusions and deficiencies may be known and further research can be done. "The purpose of literature review is to develop some expertise in one area, to see what new contribution can be done and to receive some ideas for developing a research design." (Wolff, Howard K. \& Pant, P.R., 1999: 30)

Scientific research must be based on the past knowledge. The previous studies cannot be ignored because they provide the foundation to the present study. In other words, there has to be continuity in research. A careful review of literature helps the researcher in avoiding any duplication of work done earlier. It enables the researcher in discovering important variables relevant to the area of the present research.
"The main reason for a full review of research in the past is to know the outcomes of those investigations in area where similar concepts and methodologies had been used successfully. In this connection a review of previous related research projects will help the researcher to formulate a satisfactory structure for the project." (Joshi, P.R., 2001: 89)

The primary sources of the literature review are all kinds of published materials which are relevant to the areas of interest including thesis, dissertations, business reports, books, articles and government publications. Review should be made in terms of objectives, methodology, finding gaps, deficiencies etc.

This present chapter is divided into three sections. First section is conceptual review, the second section is review of related studies and third section is review of research tools and techniques.

Relevant, reliable and comparative information is needed to evaluate the financial performance.

## 1. CONCEPT OF BANKS

Generally, an institution established by law which deals with money \& credit is called bank. A bank simply carries out the work of exchanging money, providing loan, accepting deposit and transferring money.

According to the section 2(a) of Nepal Rastra Bank Act 2058, "Bank means the Nepal Rastra Bank established under the section of this act". Similarly, section 2(b) of the Commercial Bank Act 2031, "Bank means a commercial bank established under this act". Since the bank established by both of these acts are called bank we do not find clear definition of it. In addition to this, section 2(a) of Negotiable Instrument Act 2034, defines that a bank which established under the existing law shall be called bank.
"It is really very difficult task to express and give comprehensive meaning of bank in just a few words. In simple way, a bank is an institution which collects money from those who have it spare or who are saving it out of their income and lends this out to those who requires it." (Bhandari, Dilli Raj, 2003:13)
"The term bank in modern times refers to an institution, which deals with money and accepts deposits and advances loans. It also deals with credit; it has the ability to create credit i.e the ability to expand its liabilities as a multiple of its reserves." (Paul, R. R., 1996:6-B)

In the present days, various types of banks are established for instance industrial bank, commercial bank, agricultural bank, co-operative bank, development bank etc. They have their own meaning and definition. In general bank can be defined as financial institution that collects deposits, advances loans, creates credits, deal on exchange, issue of money, transfer of funds etc.

## 2. MEANING OF COMMERCIAL BANK

As mentioned earlier there are various types of banks and one of them is commercial bank. Section 2 (a) of the Commercial Bank Act 2031 has defined that commercial bank means a bank which operates currency exchange transactions, accepts deposits, provides loan, performs dealing, relating to commerce except the banks which have been specified for the co-operative, agricultural, industry of similar other specific objective.

A commercial bank has been defined as an institution, which receives deposits of money or of credit and which seeks profit through the extension and sale of its own credit. According to the American Institute of Banking, "commercial banking is the corporation, which accepts demand deposits, subject to check and makes short term loan to business enterprises regardless of the scope of its other sources". (American Institute of Banking, 1972: 345)

Commercial bank is an important bank which provides different services for the economic development of the nation. It has covered each and every aspect of the economy. In the absence of these kinds of services provided by commercial banks, development of various sectors of the economy would not be possible. The whole community derives benefit from the bank in different ways. It facilitates the commerce of the country. In addition to the acceptance of deposits, lending and investing, they provide multiple services including accepting travelers cheques, underwriting, purchase and sale of securities, government bonds for customers, buy and sale of foreign exchange, the issuance of commercial letter of credit, supply of timely credit and market information, providing remittance facilities and so on.
"Role of banks primarily consists of the utilization of deposits and providing credit. In other words banks in such countries have very important role to play in accumulating scattered resources and diverting such resources into productive channels. On the other hand, obviously they pull all the scattered savings that are idle or otherwise would have been wasted in unproductive consumption like marriage, gambling, festivals, social economic activities etc. and they channel them in productive investment or the other. Most of the developing countries suffer from almost complete lack of capital market. Both commercial banks and non-banking financial institutions consequently have a special role to play in the long process of growth. In principle they should undertake the responsibility for activating the increasing flow of personal savings so that the amount of hoarded wealth is diverted from unproductive to productive uses". (Pant,Y.P., 1971:14)

A sound banking system depends partly on the control exercised by the central bank and law \& policy enacted by the state but to a large extent it depends upon the customers' trust that their deposits will be looked after in the best possible way and innovative services provided to its customers. While profitability remains a major consideration, this must sometimes be set a side in favour of an informed and ethical judgement that takes account of the interest of others.

Thus, in an under developed country like Nepal, establishment of commercial banks are very essential for the rapid economic development. Although these banks are
truly inspired with the objectives of gaining profit, these banks also established to accelerate common peoples economic welfare \& facility, to make available loan to the agriculture, industry and commerce and to provide the banking services to the public and the state. By providing varieties of services and functions to the overall sector of economy, commercial banks have contributed to ever growing economic up-liftment of the country. It cannot be denied that without the development of commercial banks in the country the four wheels of economic development like agriculture, industry, trade and commerce would be paralyzed.

## 3. HISTORY OF COMMERCIAL BANK

Historically, we find the evidence that the banking custom and tradition begun before $8^{\text {th }}$ century in Nepal. But the growth of commercial banks in Nepal is not so long comparison with other developing or developed country. It took the long time to come to this present banking position.

Commercial banking in modern sense started with the inception of Nepal Bank Limited (NBL) in 1994 B.S.. Before NBL, Nepal had no other commercial banks. "Till the establishment of Nepal Rastra Bank (NRB), NBL remained the only financial institution of the country. Its contribution to sustain and improve the economic aspect of nation cannot be underrated. NBL discharged the jobs of central bank to apart from commercial banking functions in order to make stability in the economy, from beginning till the establishment of central bank. During the period NBL played vital role in creating the banking habits among the people, widening, magnetized area and helping business communities and the government in various ways" (NRB Samachar, Baisakh, 2045: 2). Due to NBL's nature and scope of the business, the bank was unable to regulate and manage currency credit and central banking function properly. At same time, with growing realization and need for promoting banking activities in the country, the establishment of central bank has become urgent. As a result NRB was established on 2013 B.S. under the NRB Act 2012.
"The establishment of NRB set a milestone in the history of banking in Nepal. After this new way of thinking and new sort of spirit arose in the field of banking. NRB was established with objectives of supervising, protecting and directing the functions of commercial banking activities". (Shrestha, Sunity, 1995: 4)

The major challenge before NRB today is to ensure the robust health of financial institution. Integrated and speedy development of the country is possible only when competitive banking service reaches every nook and corner of the country. Keeping this in mind, government set up Rastriya Banijya Bank (RBB) in 2022 B.S. as a fully government owned commercial bank.

Till 2031 B.S. two commercial banks NBL \& RBB were functioning under two different acts. So it was felt necessary to introduce a new commercial bank act to bring there two commercial banks under the same policy and rule. On 2031 B.S., commercial bank act 2021, and Rastriya Banijya Bank Act 2021 were amended and introduced new commercial bank act 2031 after then NBL \& RBB banks are functioning under the commercial bank act 2031.

The tasks of bank are very dynamic, complex and riskier. In this context only local commercial bank could not play their role in the development of modern banking. Realizing this fact, Government of Nepal introduced the liberalization and open economic policy in 2040's. As a consequence of the step taken by the government, third commercial bank in Nepal or the first foreign joint venture bank was set up as Nepal Arab Bank Limited (Presently known as Nabil Bank Ltd.) in 2041. The inception of the bank proved
to be landmark in the history of banking. It gave new ray of hope to the lethargic financial sector. So, two foreign joint venture banks Nepal Indosuez Bank Ltd. (now called as Nepal Investment Bank) and Nepal Grindlays Bank Ltd. (now called as Standard Chartered Bank Nepal Ltd.) was established in 2042 and 2043 respectively. The very marketing concept of these banks forced the banks in operation to be more customers oriented and led the favour of commercial banks. Having observed the success of these banks and also because of liberal economic policy adopted by the government, the number of commercial banks increased rapidly. At present there are 25 commercial banks, which are providing their services and facility to the society and nation. Nepalese banking system has now a wide geographic reach and institutional diversification.

Although, Nepalese banking sector is dynamic, a lot of scope for development of this sector exists. This is because the banking and non-banking sectors have not been able to capture all the potentialities of business till this time. It is evident from the Rural Credit Survey Report that the majority of rural credit is supplied by the unorganized sector at a very high cost - perhaps being at two or three time of the formal sector - suggesting that the financial sector is still in the path of gradual development. Overdue loans and inefficiency of the older and the larger of commercial banks have aggravated and have been made to compete with the new trim banks with no rural operations. Also, the commercial banks, domestic or joint venture have shown little innovation and positive attitude in identifying new areas of saving and investment opportunities.

## 4. FUNCTION OF COMMERCIAL BANK

In this modern world, commercial bank performs such a variety of functions that it is not possible to make all inclusive lists of their functions and services. In Nepal fundamental functions performed by commercial banks are discussed below.

## a) Accepting Deposit:

One of the main functions of commercial banks is to acceptance of deposit. The bank allows for opening different types of accounts to accept deposit for their customers such as.

- Current Deposit: The deposit in which an amount is immediately paid at the time of account holders demand is called current deposit. Bank normally does not give interest on this account. On the contrary, in can charge a small amount on the customer for the services rendered by it. Current deposit is also known as demand deposit.
- Fixed Deposit: The deposit in which amounts are deposited for the certain period of time and can't be withdrawal before the expiry of that period is called fixed deposit. Rate of interest on this account is higher than that of other types of accounts.
- Saving Deposit: The deposit in which amounts are deposited for saving purposes is called saving deposit. Some restrictions are imposed on the depositors under this account. For example, he/she can withdraw only a specified sum of amount in a week.
- Recurring Deposit: The purpose of these accounts is to encourage regular savings by public, particularly by the fixed income group. Generally, money in these accounts is deposited in monthly installment for a fixed period and is repaid to the depositors along with interest on maturity.
- Call Deposit: Call deposit incorporates the characteristics of current and saving deposit. Current in the sense the deposit is withdrawn at call and saving in a sense that the depositors earn interest. Interest rate on call deposit is negotiable between the bank and the depositors and hence it is normally not announced to the public.


## b) Advancing of Loans:

Another important function of the commercial bank is advancing loan to a person, company and institution. Bank provides loans in different terms and conditions. Various types of loans granted by the banks are discussed below.

- Cash Credit: It is a type of loan, which is given to the borrower against his current account in the name of borrowers and allows him to withdraw borrowed money from time to time upto a certain limit as determined by the value of his current assets. Interest is charged only on the amount actually withdrawn from the account.
- Overdraft: The bank allows its respectable and reliable customers to overdraw their accounts through cheques. The customer pays interest to the bank on the amount, which is overdrawn by them. An overdraft is granted against security of certain investments like bonds/fixed deposit or is given without any security.
- Term Loans: The commercial banks have also started advancing medium-term and long-term loans. The maturity period for such loans is more than one year. The amount sanctioned is either paid or credited to the account of the borrower. The interest is charged on the entire amount of the loan and loan is repaid either on maturity or in installations.
- Discounting Bills of Exchange: Through this method, a holder of bill of exchange can get it discounted by the bank. After making some marginal deductions (in the form of commission) the bank pays the value of the bill to the holder. When the bill matures, the bank gets its payment from the party.
- Money at Call \& Short Notice: Such loans are very short period loans and can be called back by the bank at a very short notice or say one day to fourteen days. These loans are generally made to other bank or financial institutions.


## 1. Credit Creation:

Credit creation is the natural outcomes of the process of advancing loan to its customers. It does not lend cash but opens an account in the borrowers name and credits the amount of loan to his current account. "Thus, whenever a bank grants a loan, it creates an equal amount of bank deposit. Creation of such deposits is called credit creation which results in a net increase in the money stock of the economy. Bank has the ability to create credit many times than their deposits and this ability of multiple credit creation depends upon the cash reserve ratio of the banks" (Seth, M.L., 1992: 221)

## 2. Agency Functions:

The commercial bank acts as an agency, it carries out these works for its customers in the following ways.

- A bank makes payment after taking commission for the cheque, draft and bills of exchange presented by the customers.
- A bank on the request of its customer, transfer money from one place to another by draft, mail transfer or telegraphic transfer.
- Bank buys and sells stocks and debentures of a private companies as well as government securities on behalf of its customers.
- A bank collects the interest, commission, dividends etc. for its customers. Similarly, on behalf of its customers it pays their subscriptions, rent, insurance premium, taxes etc.


## 3. General Utility Functions:

Apart from agency functions, a commercial bank discharges the functions of general utility also. These functions are discussed as below.

- A commercial bank exchange the foreign currencies earned by his customers with the permission of central bank.
- A bank issues travelers cheques in the customers name \& communicates the credit information or notice for his customers.
- A bank gives financial and professional advices to his customers.
- A bank provides locker facility for his customers where they can keep their valuables (ornaments, documents etc.) safely.
- Bank issues credit cards to highly credit worthy customers. Bank also issues debit cares as well. This relieves the customers from carrying cash.
- Now a days, bank allows its customers to deposit and draw money from their accounts through automated teller machine (ATM).
- Bank offers its account holders of a branch to avail some banking services from other branches, which is called any where branch banking service (ABBS).
- Similarly, at present banks are providing various modern services to their customers like mobile banking, internet banking etc.


## 5. PROBLEMS OF BANKING IN NEPAL.

There are lots of problems, which have been facing by banks in Nepal. Some of the major problems being faced by banks are explained as follows.

- Nepal Rastra Bank (NRB) has the power, right \& duty to inspect, supervise and control the activities of banks. It has the right to punish and fine banks, if the rules and regulations have been violated by them. NRB has exercised this right from time to time. But it has failed to exercise this power \& right for the purpose of making healthy banking system. NRB has maintained only the formality over the banks and financial institution. This lack of effective control and correct direction may raise problems to the banks. (Kharel, S.K., \& Sharma, N.K., 2003: 6)
- Banks are facing numbers of problems due to the present situation of the country. They have centralized their banking activities in urban areas because of the security problems arise in the country. Government of Nepal has failed to provide necessary securities to those banks which are operating in rural areas. As a result, some of the banks have relocated their branches from unsafely to safely places.
- It has been challenge for banks to invest their funds in productive sector because of economic depression of the country.
- One of the major problems faced by banks is political influence upon them. Because of the political pressure bank can't operate its operations independently and smoothly. Political pressure in appointment, promotion of employee, distribution of loans etc. affects the functions of the bank, which ultimately affects the profitability of the bank.
- Existing laws and rules are insufficient for development of banking sector. There are lots of contradictions between various acts. This raises different problems in the operation of banking activities. Therefore, new laws and policies should be enacted by the government to encourage the banking activities.


## 6. NEPALESE LEGISLATION AND REGULATIONS RELATING TO COMMEERCIAL BANKING ACTIVITIES.

There are many acts, legislation and regulations which control and regulate the commercial banking activities in Nepal. Some acts which are concerned with commercial banking activities in Nepal are,

- Nepal Rastra Bank Act 2058
- Commercial Bank Act 2031
- Negotiable Instrument Act 2034
- Foreign Exhange (Regulation) Act 2019
- International Financial Transactions Act 2055
- Company Act 2063
- Contract Act 2056

Besides these acts, regulations made under these acts and policies framed, instructions and directives issued by government of Nepal, NRB and the office of the company registrar from time to time are also applicable to commercial banking activities some of the important regulations and provisions pertaining to commercial banking activities in Nepal are discussed below.
$\Rightarrow$ Commercial banks are registered under the Company Act and operated under the Commercial Bank Act. The bank can start banking service as per Commercial Bank Act only after the approval of NRB.
$\Rightarrow$ As per NRB directives regarding maintenance of minimum liquidity effective from 2054 Chaitra, banks are required to maintain cash reserve as.

$$
\begin{array}{ll}
\text { Cash in Vault } & 3 \% \text { of total deposit liabilities. } \\
\text { Balance to be maintained } & \text { a. } 8 \% \text { of current and saving deposit liabilities } \\
\text { With NRB } & \text { b. } 6 \% \text { of fixed deposit liabilities }
\end{array}
$$

In case of deficit in maintaining above cash reserve ratio banks are penalized.
$\Rightarrow$ All the commercial banks without any conditions should obey or follow the instruction of NRB.
$\Rightarrow$ The current regulation of NRB prescribes that all the new commercial banks are to be established in Kathmandu at national level should have minimum paid up capital Rs. 200 billion, the existing banks in operation are required to enhance the capital level to Rs. 200 billion by the end of FY 2069/70 B.S. In the mean time, there are separate provisions on capital requirements for the national level banks to be operated outside the Kathmandu valley are required to have a minimum paid up capital of Rs. 250 million.
$\Rightarrow$ The foreign banks and financial institutions could have a maximum of 51 percent share investment on the commercial banks of national level.
$\Rightarrow$ Banks have to invest a certain percentage of loans and advances in the deprived and priority sectors. In case of shortfall of any sector banks will be penalized.
$\Rightarrow$ The commercial banks established with a head office in Kathmandu will initially be authorized to open a main branch office in the valley and thereafter, they will be authorized to open one more branch in Kathmandu valley only after they have opened two branches outside Kathmandu valley.

Banks are restricted to do the following activities.
$\Rightarrow$ To purchase or sell goods with commercial motives.
$\Rightarrow$ To purchase any immovable property for any purpose other than bank's own use.
$\Rightarrow$ To provide loans against the security of its own shares.
$\Rightarrow$ To provide loans to a director or any member of his own undivided family.
$\Rightarrow$ Extending credit to the company where the director or the member of his undivided family have $10 \%$ shares.
$\Rightarrow$ To provide loan, guarantee or facilities for an amount exceeding the percentage of its capital fund specified by NRB to a single customers, company or companies belonging to one group, except as permitted by NRB.

## 7.CONCEPTUAL REVIEW

This section, conceptual review specially the concept of financial performance, concept of bank, meaning of commercial bank, history of commercial bank, function of commercial bank, Nepalese legislation and regulations relating to commercial banking activities, problems of banking in Nepal, financial statement analysis etc. which are described briefly as follows.

## i. FINANCIAL PERFORMANCE

Profit is a lifeline of an organization. Every organization which is established as a commercial view of point aims to earn maximum profit for its survival and growth. Profit is an indicator of sound financial performance of any organization, but it is not the sole indicator. A financial performance of an organization also refers to its earning capacity, generating and mobilization of its capital funds, utilization of its overall physical facilities. In other words, financial performance is that managerial activity which has concern with the planning, organizing, controlling and administrating of financial resources of an organization. Moreover, it is basically concerned with analysis of various items of financial statement of an organization to ensure its comparative strength and weakness by using different tools and techniques.

Unlike other non bank financial companies, commercial banks do not produce any physical goods they produce loans and financial innovations to facilitate trade and industries. Their nature of assets and liabilities are different than other companies. That is why analysis of financial statement of commercial banks differs from that of other companies.

Balance sheet, profit \& loss account and accompanying notes are the most widely used financial statement of banks. The major components of assets side of the balance sheet are loans, advances and investments. Deposits and shareholders equity are the major components of liabilities side of the balance sheet. Likewise, interest earned on loan \& investment, commission earned, exchange income, interest paid on deposits and borrowings are the major components of the profit and loss account. Because of the structure of balance sheet and profit \& loss account of the commercial banks relevant, reliable and comparative information is needed to evaluate the financial performance.

## 8. CONCEPT OF FINANCIAL STATEMENT.

Financial statement refers to that annual statement which systematically contains summarized information of firm's financial affairs. It is prepared for periodical review on the progress made and results achieved during the period under review. With the help of financial statement every businessman could show actual business condition to the different parties such as government, shareholders, investors, customers, researcher etc., who are directly or indirectly related to the business.
"Financial statement is an organized collection of data organized according to logical and consistent accounting procedures. It may show a position at a moment in time as in the case of balance sheet, may reveal a series of activities over a given period of time in case of an income statements." (Eugene, Stalbey, 1954:304)
"Financial information is contained in the financial statement or reports, which is needed to predict, compare and evaluate the firm's earning ability and in decision making" (Munakarmi, Shiva Prasad, 2002: 460)

In this connection, I.M.Pandey says, "financial statement refers to the two summarized financial reports which the accountant prepares usually at the end of the fiscal year of firm. They are balance sheet or statement of financial position and the income statement or profit \& loss account." (Pandey, I.M., 199: 35)

In brief, the statement which is prepared at the end of each financial or fiscal year is known as financial statement. The basic object of financial statement is to supply meaningful financial information to those who have a head of it and legitimate interest and right to have such information. The generally accepted accounting principles and procedures are followed to prepare these statements. The balance sheet and profit \& loss account are important financial statement used in business. A short explanation of balance sheet and profit \& loss account or income statement is presented below.

## i. Balance Sheet:

Balance sheet is a most significant financial statement. It is a statement of assets and liabilities which indicates the financial position of the firm at a particular moment of time. It contains information about economic resources and obligations of the business and owner's interest in the business. In term of accounting, the balance sheet communicates about assets, liabilities and owner's equity in the firm. In short, it provides information about the financial position of the firm at the end of accounting period.
"A balance sheet may, therefore, be defined as a statement prepared with a view to measure the exact financial position of a business on a certain date. In other words, it represents assets or liabilities existing on the date of closing of accounts." (Juneja, C. Mohan, Chawla, R.C., \& Sakesena, K.K., 1994: 304)

Balance sheet has two sides; Assets and liabilities. An asset of the firm refers to the economic resources owned by the firm. Liabilities represents the economic obligation to be payable in some time in future. The commercial bank has its own unique features. Its operations and activities are different than other companies. Hence, the nature of assets and liabilities of commercial bank also differs than that of other companies. The major components which represent the assets side of the balance sheet of commercial banks are cash \& bank balance, investment, loan, advances \& bills purchased, money at call \& short notice, fixed assets etc. Similarly, major components which represent the liabilities side are deposits, short term loan, bills payable, deferred liabilities, shareholder's equity \& reserves.

## ii. Income Statement or Profit \& Loss Account:

Profit \& loss account is a statement that shows the results of operation for a period of time. It is also called income statement. It is a summary of revenues, expenses and net income (loss) of an organization for a particular period of time. So, it reflects the earning capacity and profitability of an organization.
"The determination of the net income of a business enterprise for a certain period of time is the central feature of accounting. Business is primarily conducted for the purpose of earning income and therefore the net income is the most significant figure produced by the accounting process to measure the degree of attainment of the objective.

The income statement provides a review of the factors directly concerned with the determination of the net income; the revenue realized from the sales of goods or services
and the cost incurred in the process of producing the revenue. These costs are cost of sales and selling, general and administrative expenses. They are deducted from the revenue to determine the income from regular operations. In addition, they may be income from other sources and other deductions from income" (John, N. Mayer, 1974:15)

In this statement, revenue of a certain period are compared with the expenses, the differences being either net profit or net loss for the period. Hence, it can be say that income statement is the "Score Board" of the firm's performance during the particular period of time. The generally accepted convention is to show one year's events in the profit and loss account. Analysis of profit and loss for several years may reveal desirable or undesirable trends in the profit earning capacity of an organization.

## 9. FINANCIAL STATEMENT ANALYSIS.

Balance sheet and income statement don't give all the required information regarding the financial operation of firm. The users of financial statement can get better information about the financial strengths and weakness if the users properly analyze the information reported in these statements. Analysis of financial statement is the process of critically examines in details accounting information of the financial statement. In the word of I.M. Pandey, "Financial statements analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of balance sheet and profit \& loss Account" (Pandey, I.M., 1993: 96)
"Financial statement analysis is largely a study of relationship among the various financial factors in a business as disclosed by a single of statement and a study of tends of these factors as shown in series of statement" (John, N. Mayer, 1974: 392)
"It is also the analytical and judgmental process that helps answer questions that have been posed. Therefore, it is means to end. A part 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." (Helfert, E.A., 1992: 2)

In addition, it can be taken as the starting point for making plans before using any sophisticated forecasting and planning procedures. Financial data can be used to analyze a firm's past performance and assess its present financial strength. Management of the firm 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.

Similarly, N.P. Agrawal says, "The process of analysis of financial statement involves the compilation and study of financial and operating data and the preparation and interpretation with measuring devices such as ratio, trend percentage." (Agrawal, N.P., 1981: 5)

According to Man Mohan \& S.N. Goyal, "Analysis and interpretation of financial statements are attempt to determine the significance and meaning of financial statement's data, so that a forecast may be made of the prospects for future earnings, ability to pay interest, debt maturities both current as well as long term and profitability." (Mohan, Man, \& Goyal, S.N., 1988: 390)
"Financial statement analysis involves a comparison of a firm's performance with that of others firms in the same line of business, which is often identifies the firm's industry classification." (Weston, J.F., Besley, S., \& Brigham, F.F., 1996: 78)

In summary, financial statement analysis highlights the strength and weakness of the business undertaking by regrouping and analyzing the figures contained in financial statements and by making comparison of various components and by examine their
contents. The analysis reveals how far the dreams and ambitions of the tough management have been converted into reality during each financial year. 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.

## 10. SIGNIFICANCE OF FINANCIAL STATEMENT ANALYSIS.

From the concept of financial performance analysis, it has proved that one can explore various facts related to the past performance of the business \& predict out the future potentials for achieving expected results. In the present time, various parties are involved in the business such as shareholders, creditors, depositors, employees, trade associations, managers, investors and other persons who are directly or indirectly involved in the business. They all are interested in the financial conditions of the firm for their own different purposes. In this regard, financial statement analysis is very helpful in assessing the financial position \& profitability of a firm. The importance of financial statement analysis is axiomatic and uncontroversial but it is significant to hole the extent \& fields of its importance. In this connection, N.P. Agrawal states, "In the interest of good health, medical authorities advice every individuals to have a periodic examination of his body and similarly in the interest of sound financial policy, every company should also analyze its accounts periodically." (Agrawal, N.P., 1981: 5)

Highlighting on the importance of financial statements as well as analysis, J.C. Vanhorne Says, "In order to bargain more effectively for outsider fund, the management of a firm should be interested in all aspects of financial analysis that outsider supplier of capital use in evaluation the firm." (Vanhorne, James C., 11th edition:691). Further, Management of a concern is interested in the result of financial statement analysis because the resultant outcomes serve inputs for the present and future decision making purpose.

Financial statement analysis thus assists the management to take benefit of the strategic management technique by providing the management with the information regarding the strength \& weakness of the enterprises so as to exploit the opportunities lying in the environment and overcome the threats posed by the environments. According to Weston \& Brigham, "Financial plans may take many forms, but any good plan must be related to the firm's existing strengths and weakness. The strengths must be understood if they are to be used to proper advantage, and the weakness must be recognized if corrective action is to be taken." (Weston, J. Fred, \& Brigham, F. Eugene, 1981:145)
"The information generated through financial statement analysis can be crystallized in such a way that its implementation is classified and attention can be concentrated upon facts which are in the usual financial statements, completely hidden behind a mass of figures." (J.A.,Mc Kinnohand, \& L.J.E., Trope, 1948: 4)

In this connection, financial statements analysis is helpful to the decision maker for finding out favourable and unfavourable situation of business firm. Likewise, financial statement analysis is exceptionally useful to a member of parties who related directly or indirectly to the firm. The analysis is important to them for different aspects of their interest.

## A. REVIEW OF RELATED STUDIES.

This section- Review of Related Studies covers the topic review of related publications and studies \& review of previous related research studies. The view expressed by different person, anthers, specialists etc. in their publications (books, articles) regarding commercial bank and the some previous research studies which are relevant to this study are mentioned topic wise in this section.

## 1. REVIEW OF RELATED PUBLICATIONS AND STUDIES.

The view expressed by different persons, anthers, professors, executives in their publications regarding the operation, function, activities, financial position, performance of Nepalese commercial banks have been reviewed.

- Sarita and Bhuwan Dahal (2060) in their book "A Hand Book of Banking" have made an attempt to highlights in to different topics - Introduction of banking, Banking operations, Liquidity, Profitability, Loan and capital, Management of a bank. This book presents gradual development of banking business in Nepal, the current position of banking business in Nepal, current operation financial and managerial strengths and weakness of banking business in Nepal. The authors express their views on the financial position of the commercial banks in Nepal as under:-
"All the joint venture banks are running at profit but two major banks i.e. Nepal Bank Ltd. And Rastriya Banijya Bank are incurring huge losses. Moreover, all the joint venture do not have strong financial base in respect of capital adequacy and EPS. Non operating assets and interest suspense of all the banks including the best banks like NABIL and SCB are also increasing. This is a serious problem of banking in Nepal because bad quality of assets leads bankruptcy of many banking in South-East Asia.
There is a rumor that some banks are manipulating in the classification of credit and less provision is being made. If the rumor is trod, their balance sheet is not presenting the true picture. In the long run, this will prove to be very costly for depositors in particulars."
- Dr. Sunity Shrestha associate professor T.U. in her articles "Demand and supply of credit in Nepalese commercial banks" published in Nepal Bank Patrika 2056, Baisakh concludes that demand of credit is positively affected by the lending rate and nonagriculture income of the country. Where as the supply of the credit is positively related with total deposit of the bank and the lending rate. Thus these variables can be considered as the determining variable for the demand and supply of the credit of the commercial banks of Nepal, and it can be forecasted based on these variables. This is the analytical study based on secondary data of all the commercial banks in Nepal.
- C. Madlin and H. Snock (1998) in their book, "Evaluation of Banking Supervision in Nepal Rastra Bank" express "When government decided to establish banks with joint ventures two benefits were expected; first that competition would force domestic banks such as NBL and RBB to improve their services and efficiency, second that introduction of new banking procedures methods and technology would occurs".
- Govinda Bahadur Thapa (2000) in his article "Nepal Banking System: Can the mess be managed?" states that "The joint venture banks have been earning a huge profit not from fund based lending but from non-fund based activities and from investing outsides. That is why these banks have been less interested to lend aggressively in the domestic market. Economic activities have slow downed in Nepal for several years. However, commercial banks have not lowered their lending rates to revitalize the economy. On the contrary, the commercial banks have been discouraging the deposits to get rid to excess liquidity. And, new avenue that a country with such a low saving rate and need to unlimited investment, is investing huge amount of resources in developed countries and is pilling up international reserves. Therefore, it can be inferred that Nepalese banking system has not been made and motivated to contribute to the promotion of the economic activities in the country as it should do"
- The article "Nepal Bank : Not as bad as KMPG projected" published on BM magazine of July 2000 edition, concludes that there are problems in banking sector,
as there are problems in any other sectors. But from the actual status and growth figures they feel that the overall banking sector in Nepal stands on rather healthy feet. Thus, for any investor in banking sector they believe that it might be worth while to invest in the top banks.
- Mr. Deependra B. Kshetry in his articles, "Nepalese Banking Industry - Status and Prospects" published in the free market, 2057 Baisakh states that the principal players of the banking industry in Nepal are stuffed with enough liquidity and therefore occasionally tend to ignore small savers. But the entrepreneurs claim that banking sector is disinterested in providing financial resources to trade and industry. It may be either because interest rates are falling or the sustain ability of bank financial projects in locking."
- The article "How much bankable is your bank" published on BM magazine November 2000 edition states that the strength and performance of any commercial bank can not be judged on the basis of single parameter. The parameters of strength could be the total equity employed, total assets held, total deposits mobilized etc. Where as performance can be measured with operating profit ratio, deposit to advances ratio, growth in advance, deposits and operating profit etc. P/E ratio shows the confidence of the investors in the stock of a bank.
- Prof. Dr. M.K. Shrestha (1995) on "Commercial banks comparative performance evaluation" has concluded that JVBs are new operationally more efficient, having superior performance while comparing with local banks. Better performance of JVBs is due to their sophisticated technology, modern banking methods and skill. Their better performance is also due to the burden the banks facing governments' branching policy in rural areas and financing public enterprises. Local banks are efficient and expertise in rural sector, but having number of deficiencies. So local banks have to face growing constraints of social, economical, political system on one hand spectrum and that issues and challenges of JVBs commanding significant banking business on other spectrum."


## 2. REVIEW OF PREVIOUS RELATED RESEARCH STUDIES.

The researcher has found various studies conduct in the field of financial performance of commercial banks. Different 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. Some of the relevant research studies have been mentioned below.

- Mohan Kumar Dahal a student of MBA in his unpublished master's thesis "A comparative study of financial performance of HBL \& NBBL" concludes that liquidity position of NBBL is better in comparison to HBL. That means NBBL is more capable to meet the demand of its depositors. The overall profitability position of HBL is better in comparison to NBBL because deposit utilization position of HBL is higher than NBBL. Return on net worth, return on total assets, return on capital employed ratio of HBL is higher than NBBL. He further found that the overall trend analysis shows that NBBL is rapidly increasing trend. In this trend remain to continue NBBL will be able to collect more deposit and will be invested more fund in future.
- Rajiv Raj Joshi in his unpublished master's thesis "A Comparative study on financial performance of NABIL \& NGBL" with the main objectives of evaluating the financial performance of commercial banks and to highlights on the activities. He concluded that the commercial banks have maintained a sound liquidity position. The banks are
utilizing their resources efficiently. The investment pattern of both banks seems to be appropriate according to their deposit structure. Similarly, he tried to find out the overall profitability of NGBL \& NABIL and trend analysis of these banks on different regards. Based on the finding of analysis, the researcher also suggested both the bank on their different aspects for their improvement of performance in future.
- A research study made by M.P. Khatiwada in his unpublished master's thesis "A comparative study of the financial performance of NABIL \& NSBL" concluded on their deposit utilization that the cash \& bank balance to total deposit of NSBL has higher proportion than that of NABIL. It means NSBL keeps more amounts of cash in order to meet its cash requirement of its depositors and for other contingency than that of NABIL Keeping more idle cash balance is unprofitable.
- Bindeshwar Mahato in his unpublished master's thesis "A comparative study of the financial performance of NABIL \& NIBL" concluded that NABIL is more oriented towards discharging responsibility towards its shareholders than NIBL. More than this, NABIL is found paying more attention towards the attainment of national objectives. NABIL's participation in the task of economic development with liberal attitude towards the government and being more responsive to the national priorities like branches expansion, more employment, more resources mobilization etc. So, from the share holders and government point of view, NABIL is performing much better than NIBL. But it doesn't mean that NIBL is not performing well. Relatively, NABIL is doing better banking business.
- A research study conducted by Sanjeev Shrestha entitled "Profitability of joint venture foreign banks with reference to NABIL, HBL \& NBBL" pointed out that NBBL has the poorest profitability position. The liquidity position is not so sound and the variation among ratios is comparatively high. Though, it has the highest percentage of deposits mobilization in to loans and advances, discounted and purchased bills. The earning from them is considerably low. In case of HBL, it has satisfactory profitability position, but the liquidity position gauged in to three ratios are the lowest of all. The credit deposit ratio is very lower than NBBL, but the rate of earning is satisfactory. Likewise, the earning position of NABIL measuring from various profitability ratios shows sound as HBL. In case of liquidity position, it is comparatively in better position. The cash deposit ratio is too much lower than NBBL but earning (net) is very good.
- Ganendra Acharya's study entitled "A comparative study of financial performance of joint venture banks in Nepal especially on the NABIL \& NIBL" pointed out that the liquidity position of both the banks was below the standard of $2: 1$. The study further found that the banks are utilizing their assets more efficiently. Capital structure was highly leveraged. Capital adequacy ratio of NIBL was better than that of NABIL and the profitability position of both banks was 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 maintain operational expenses, to mobilize resources more efficiently and to extend their banking facilities even in the rural areas.


## B. REVIEW OF RESEARCH TOOLS.

Financial statements are prepared with the help of financial transactions which have placed during the financial year. It is prepared to provide the financial information
that helps to take decision. But information provided in the financial statements is not an end of itself, as no meaningful conclusion can be drawn from these statements alone. The information provided in financial statements is useful in making decision through analysis and interpretation. Financial analysis is the process of identifying financial strengths and weakness of the firm by properly establishing relationship between the items of financial statements i.e. balance sheet \& income statement. There are various tools or methods available for the financial statement analysis. Some of the well accepted and important tools have been used in this study - they are as follows.

## 1. Ratio \& Percentage:

After the required data have been collected, reorganized and tabulated, they are ready for further analysis. In the process of reorganization and tabulation the size of data is considerably reduced and a large number of figures are condensed. This is done with a view to make the data easily understandable and fit for analysis and interpretation. But even after condensation, data might be fairly large in quantity and the figures may be very big and unwieldy. It may not be easy to draw inferences from them. To remove this difficulty, ratios and percentage are calculated so that the big figures are reduced to small ones and a relative study of the data is possible.

Ratios and percentage are obtained by a combination of two or more figures. They are derived from the absolute figures collected for the purpose of investigation. To evaluate the performance of an organization, ratios and percentages from the figure of different accounts consisting in balance sheet and income statement must be created and analyzed.
"The term ratio refers to the numerical or quantitative relationship between two items/variables. A ratio is calculated by dividing one item of the relationship with other." (Khan, M.Y., \& Jain, P.K., 1990:117)

In the word of Shiva Prasad Munakarmi, "Ratio is the expression of one figure in terms of another. It is the expression of relationship between the mutually independent figures." (Munakarmi, Shiva Prasad, 2002: 462)

Ratio is used as an index of yardstick for evaluating the financial position and performance of the firm. It helps in making decisions as it helps establishing relationship between various figures and variables. In this connection, Erich A. Helfert states, "The ratio provides guides and clues especially in spotting trends towards better or poor performance and in finding out significant deviation from any average or relatively applicable standard." (Helfert, Erich A., 1957:57)

The absolute accounting figures presented in the financial statements do not provide meaningful understanding of the performance and financial position of a firm. An accounting figure conveys meaning when it is related to some other relevant information. Therefore, the relationship between two accounting figures must be expressed mathematically which is known as financial ratio. In another hand, a single ratio by itself does not indicate favourable or unfavourable condition of a firm until and unless it is compared to some appropriate standard. So, ratio by itself is not a conclusion, as they are only means and not an end.

Similarly, another simple and most widely used tool is percentage. The term "percent" means out of hundred or per hundred. Percentage also establishes the relationship between two figures but it establishes the relationship in terms of hundred. By calculating percentage of different figures of concerned banks we can easily make qualitative judgement about their financial performance and meaningful conclusions and recommendations can be drawn on that basis. In this research work, ratio and percentage are frequently used to analyze the data. On the basis of these tools liquidity position,
deposit utilization, deposit structure, investment structure, fund structure, income \& expenditure structure etc. of the three selected banks are analyzed.

## 2. Cash Flow Analysis :

Another yardstick for measuring the financial performance is Cash Flow Analysis. Cash Flow Analysis is done through statement of cash flow. A Cash Flow Statement is a statement of a company's ability to generate cash from various activities and their need of cash. It is useful for short term financial planning. A Cash Flow Statement summarizes sources of cash inflow \& uses of cash outflow of the firm during a particular period of time.
Case Study Financial analysts generally consider cash flow to be the best measure of a company's financial health. Increased cash flow means more funds are available to pay dividends, service or reduce debt, and invest in new assets. On the other hand, reported net income is heavily influenced by a firm's accounting practices. Reduced income generally means lower taxes and more cash, thus the same accounting practices that reduce net income can actually increase cash flow. A firm with large amounts of new investments and corresponding high depreciation charges might report low or negative earnings at the same time it has large cash flows to service debt and to acquire additional assets. Cable companies have huge investment requirements and are typical of firms that may be quite healthy in spite of reporting net losses. In early 1996, TCI Communications, at the time the nation's largest cable operator, reported fourth-quarter results that included a net loss of $\$ 70$ million, more than double the loss reported in the year-earlier quarter. At the same time, the firm added more than a million new customers and reported a $25 \%$ increase in revenues. It also reported a 5\% increase in cash flow. Thus, although TCI reported an additional loss, the quarter was generally considered quite successful. Operating cash flow, calculated as cash flow (the sum of net income and noncash expenses such as depreciation, depletion, and amortization) plus interest expense plus income tax expense, is an important consideration in corporate acquisitions because it indicates the cash flow that is available to service a firm's debt.

## 3. Average:

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 value in the group. Out of various measures of central tendency, arithmetic mean is one of the useful tools applicable here. Arithmetic mean of a given set of observation is the sum divided by the number of observations. The arithmetic mean, usually denoted by $\overline{\mathrm{X}}$ (pronounced as X bar) is given by

$$
\begin{aligned}
& \operatorname{Mean}(\overline{\mathrm{X}})=\frac{\mathrm{x}_{1}+\mathrm{x}_{2}+\ldots \ldots \ldots \ldots \ldots+\mathrm{x}_{\mathrm{n}}}{\mathrm{~N}} \\
& \text { Or, Mean }(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{\mathrm{~N}}
\end{aligned}
$$

Where,

$$
\begin{aligned}
\Sigma \mathrm{X} & =\text { sum of the values } \\
\mathrm{N} & =\text { No. of observation. }
\end{aligned}
$$

The purpose for computing the mean for set of observations is to obtain a single value which is representative of all the items and which the mind grasps simply and quickly. The single value is the point of location around which the individual items clusters.

## 4. Standard Deviation:

In order to measure the magnitude of dispersion statistical tool used is standard deviation. Instead of other measure of dispersion this one is regarded as better one because it considers every element of the observations standard deviation is denoted by Greek letter sigma ( $\sigma$ ). The value of standard deviation depends upon whether the other return data are scattered or clustered around the central value. If the other values are scattered from the central values, it is regarded more volatile or risky; there the standard deviation will be higher. Similarly, if the values is clustered around the mean, the return distribution is regarded less volatile or less risky; there the standard deviation will be lower.

Standard deviation is defined as the positive square root of the arithmetic mean of the square of the given observations from their arithmetic mean. It can be computed as follows.

$$
\text { Standard Deviation }(\sigma)=\sqrt{\frac{\Sigma X^{2}}{N}-\left(\frac{\Sigma X}{N}\right)^{2}}
$$

Where,
$\Sigma X^{2}=$ Square sum of values
$\Sigma \mathrm{X}=$ Sum of the values
$\mathrm{N}=\mathrm{No}$. of observation.
The standard deviation measures the absolute dispersion or variability of a distribution. A small standard deviation indicates a high degree of uniformity or homogeneity of the data. A large standard deviation indicates just the opposite.

## 5. Coefficient of Variation (C.V.)

The standard deviation discussed above is an absolute measure of dispersion. The Corresponding measure of relative dispersion is coefficient of variation (C.V.). The coefficient of variation is a suitable measure for comparing variability of two or more series (or Set of data or distributions) with the same or different units.

Coefficient of Variation (C.V.) is calculated by using following formula.

$$
\text { C.V. }=\frac{\sigma}{\overline{\mathrm{X}}} \times 100
$$

Where,

$$
\begin{aligned}
\text { C.V. } & =\text { Coefficient of Variation } \\
\sigma & =\text { Standard Deviation } \\
\overline{\mathrm{X}} & =\text { Arithmetic Mean. }
\end{aligned}
$$

A series with smaller C.V. is said to be less variable (or more consistent, more homogeneous and more stable). On the other hand the series with greater C.V. is said to be more variable (or less consistent, less homogeneous and less stable).

## 6. Correlation Analysis.

"Correlation analysis is defines as the statistical techniques, which measures the degree (or association) between variables. In other words, it helps us in studying the covariance to two or more variables." (Shrestha, K.N., 1991:148). The terms correlation indicates the relationship between two such variables in which changes in the value of one variable, the value of other variables also changes.

Correlation can be positive or negative. If variable change to the same direction than it is positive correlation other wise it is negative. Coefficient of Correlation is calculated when it is believe that there is cause and effect relationship between variables. One of the variable will causal variable and another will be effect. Causal variable is also called dependent variable. When there is a change in causal variable, there will be corresponding change in dependent variable. The degree of change on dependent variable due to change on causal variable depends upon degree of correlation between them.

The correlation is denoted by ' r ' and is calculated by using following formula.

$$
\text { Coefficient of Correlation }(\mathrm{r})=\frac{\Sigma \mathrm{d}_{\mathrm{x}} \mathrm{~d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{~d}_{\mathrm{x}}^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}
$$

Where,
$d_{X}=X-\bar{X}$
$d_{y}=Y-\bar{Y}$

## Interpretation of correlation coefficient:

The value of 'r ' lies between $\pm 1$. Following general rules are given which would help in interpreting the result.

When $r=+1$, there is perfect positive correlation between the two variables.
When $r=-1$, there is perfect negative correlation between the two variables.
When $r=0$, the variables are uncorrelated.
Closer the value of ' $r$ ' to +1 , closer the relationship between two variables. Closer the value of ' $r$ ' to 0 , lesser the relationship.
In statistical analysis, instead of using coefficient of correlation (r), there is a tendency of using coefficient of determination ( $\mathrm{r}^{2}$ ). Interpretation of $\mathrm{r}^{2}$ is very simple. For example When $\mathrm{r}=0.9$, the coefficient of determination $\left(\mathrm{r}^{2}\right)$ will be $(0.9)^{2}=0.81$. It means $81 \%$ change on dependent variable is explained by a change on independent variable. The remaining $19 \%$ change is unexplained. It means the change is caused by other variables not included in the model.

## 6. Trend Analysis:

The general tendency of time series data to increase or stagnate during a long period of time is called trend. In the situation of analysis, different kinds of tools can be used to know the actual position of a business concern, out of which trend analysis is one which shows the percentage changes in several successive years instead of between two years. Trend analysis indicates the direction of change.

The trend percentage statements also known as trend ratio is an analytical device, which examines whether the financial position of a firm is improving or deteriorating over the years. In this regard, J.C. Vanhorne and J.M. Wachowicz say, "An analysis of percentage financial statements where all balance sheet or income statements figures for base year equal to 100 (percentage) and subsequent financial statements items are expressed as percentage of their values in the base year." (Vanhorne, J.C., \& Wachowicz, J.M., 2000: 145)

However, as the base year is always changing, so it becomes difficult to interpret the series of percentage changes and this problem becomes more evident in case of interfirm comparison. So the percentage changes may be better expressed assuming the first year as the base year. Trend percentage can be computed by using the following formula.

Trend Percentage $=\frac{\text { Yearly Amount }}{\text { Base Year's Amount }} \times 100$
The index percentage can be plotted on graph either in arithmetic scale or semi logarithmic or ratio chart to facilitate the study of trend of firm.

## Chapter - 3

## RESEARCH METHODOLOGY

The prime objective of the study is to analyze the financial performance of three selected commercial banks i.e. NABIL, NIBL \& HBL comparatively. To achieve the objective of the study an appropriate research methodology has to be followed. Hence, the detailed research methodology used in this study is highlighted in this chapter.

Research methodology describes the methods and process applied in the entire aspect of the study. It is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of fact and figure. "Research is a systematic method of finding out solution to a problem where as research methodology refers to the various sequential steps to adopt by a researcher in studying a problem with certain objectives in view." (Kothari, C.R., 1989: 19). So, this chapter deals with the methodology used by the researcher to analyze and interpret the relevant data. Therefore, in this chapter focus have been made on research design, data gathering, nature and source of data, period covered, population and sample, method of analysis and tools \& techniques used for analysis.

## A. RESEARCH DESIGN.

Research design is the overall scheme or program of research which guides the researcher in formulating, implementing and controlling of the study. It includes an outline of what the researcher will do from writing the hypothesis and their operational implications to the final analysis of data. Hence research design helps to carry out the research work smoothly.

The study aims at portraying accurately upon the financial performance of major three commercial banks viz. NABIL, NIBL \& HBL. Keeping in this mind descreptive cum analytical research design will be followed. "Descriptive research includes survey and fact finding inquiries of different kinds. The main purpose of descriptive research is description of the states of affairs as it exits at present. This method assumes that the researcher has no control over the variables; he/she only report what has happened or what is happening. On the other hand, in analytical research, the researcher has to use facts or information already available and analyze these to make a critical evaluation of the materials". (Joshi, P.R., 2001: 9)

## B. POPULATION AND SAMPLE.

The collection or the aggregate of objects or the set of results of an operation is called population. A representative part of population which we select for the purpose of investigation is called a sample. At present there are seventeen commercial banks operating in Nepal. Hence, these all seventeen commercial banks constitute the (NABIL), Nepal Investment Bank Ltd. (NIBL) and Himalayan Bank Ltd. (HBL) are selected as the sample banks for the purpose of this study. The sample size of these commercial banks which population of this study. Among of them three commercial banks named nabil Bank Ltd. represents $3 / 25$ or $12 \%$ of total population.

Out of various method of selecting a sample judgement sampling was followed in order to choose NABIL, NIBL \& HBL among the available commercial banks in Nepal. Moreover NABIL, NIBL \& HBL have been taken as sample.

## C. NATURE AND SOURCE OF DATA.

Collection of data is the first step of any research work. It can be obtained either from the primary source or secondary source. A primary source is one that itself collects the data; a secondary source is one that makes available the data which were already collected by someone else. Needless to say that this study is associated with past phenomena. Therefore, only the secondary data has been used to carry out the whole calculations. The required data is collected from various sources which are as follows.

- Annual reports to shareholders of NABIL (data collected from www.nabilbank.com the official website of NABIL.)
- Annual reports to shareholders of NIBL (data collected from www.nibl.com.np the official website of NIBL.)
- Annual reports to shareholders of HBL (data collected from www.himalayanbank.com the official website of HBL.)
- Financial statements of selected banks (data collected from www.nepalstock.com the official website of Nepal stock exchange ltd.)
- Previous related research and dissertations.
- Different books, magazines, newspaper, periodicals and journals.

So, the data used in this study is obviously the secondary data and historical in nature.

## D. PERIOD COVERED.

As these three sampled banks have been operating since long period, vast analysis will has to be done to assess the financial performance of concerned banks from their establishment date. Hence, in this study the whole period will not be analyzed. The present study is undertaken only for a period of five years from FY 2060/61 to 2064/65. On the basis of this study period, the strength and weakness of financial position of NABIL, NIBL \& HBL will be analyzed.

## E. DATA PROCESSING PROCEDURE.

In this research work, the data extracted from annual financial reports published by NABIL, NIBL and HBL is processed and interpreted considering the requirement of the study. The financial and statistical tools and techniques are applied in data processing procedure. The relevant data of five fiscal years i.e. from 2060/61 to 2064/65are reorganized, presented and interpreted.

## F. METHOD OF ANALYSIS.

This study aims to make a comparative analysis of financial performance three commercial banks namely NABIL, NIBL \& HBL. To evaluate the financial performance of the banks, various methods or tools are available. Some of the well accepted and important financial \& statistical tools \& techniques have been used is this study. These tools \& techniques are described briefly as below.

## i. Ratio \& Percentage.

While analyzing the financial performance of an organization accounting figures consisting in financial statements have to be analyzed. But absolute accounting figure
presented in the financial statements do not provide meanings until it is linked to some other relevant figure. Hence, relationship between two accounting figures must be expressed mathematically to get meaningful conclusions. Ratios and percentages help to establish the relationship between two figures. In the simplest possible form, a ratio is a quotient or the numerical quantity obtained by dividing one figure by another. It helps to summarize the large quantities and to make qualitative judgment. Ratios are very often expressed as percentage. Percentage also establish the relationship between two figures, but in terms of hundred.

In this research work, various analyses have been done on the basis of these tools. Such as liquidity position, deposit utilization, deposit structure, investment structure, fund structure, income \& expenditure structure etc.

## ii. Cash Flow Analysis :-

Case Study Financial analysts generally consider cash flow to be the best measure of a company's financial health. Increased cash flow means more funds are available to pay dividends, service or reduce debt, and invest in new assets. On the other hand, reported net income is heavily influenced by a firm's accounting practices. Reduced income generally means lower taxes and more cash, thus the same accounting practices that reduce net income can actually increase cash flow. A firm with large amounts of new investments and corresponding high depreciation charges might report low or negative earnings at the same time it has large cash flows to service debt and to acquire additional assets. Cable companies have huge investment requirements and are typical of firms that may be quite healthy in spite of reporting net losses. In early 1996, TCI Communications, at the time the nation's largest cable operator, reported fourth-quarter results that included a net loss of $\$ 70$ million, more than double the loss reported in the year-earlier quarter. At the same time, the firm added more than a million new customers and reported a $25 \%$ increase in revenues. It also reported a 5\% increase in cash flow. Thus, although TCI reported an additional loss, the quarter was generally considered quite successful. Operating cash flow, calculated as cash flow (the sum of net income and noncash expenses such as depreciation, depletion, and amortization) plus interest expense plus income tax expense, is an important consideration in corporate acquisitions because it indicates the cash flow that is available to service a firm's debt.

## iii. Average.

An average is a typical value that represents the entire mass of unwieldy data. It tends to lie within the mass of data arranged in order to magnitude. There are various types of Average, but due to the nature of this study only arithmetic mean is taken for the analysis of data. An arithmetic mean of given set of observations is their sum divided by number of observation. i.e.

$$
\begin{aligned}
& \operatorname{Mean}(\overline{\mathrm{X}})=\frac{\mathrm{x}_{1}+\mathrm{x}_{2}+\ldots \ldots \ldots \ldots \ldots . .+\mathrm{x}_{\mathrm{n}}}{\mathrm{~N}} \\
\text { Or, } \quad & \operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{\mathrm{~N}}
\end{aligned}
$$

Where,

$$
\overline{\mathrm{X}}=\text { Arithmetic mean }
$$

$\Sigma \mathrm{X}=$ Sum of the values
$\mathrm{N}=$ No. of observation.

## iv. Standard Deviation.

Standard deviation, usually denoted by letter sigma ( $\sigma$ ) measures the magnitude of dispersion or variability. Instead of other measure of dispersion this one is regarded as better one because it considers every element of the observations. The S.D. is calculated to know whether the other return data are scattered or clustered around the central value. A small S.D. indicates a high degree of uniformity or homogeneity of the data. A large S.D. indicates just the opposite.

It is calculated as follows.

$$
\text { Standard Deviation }(\sigma)=\sqrt{\frac{\Sigma X^{2}}{N}-\left(\frac{\Sigma X}{N}\right)^{2}}
$$

Where,
$\Sigma X^{2}=$ Square sum of values
$\Sigma \mathrm{X}=$ Sum of the values
$\mathrm{N}=$ No. of observation.

## v. Coefficient of Variation (C.V.)

Standard deviation discussed above is an absolute measure of dispersion. It measures the variation which is expressed in terms of original units of series. Coefficient of variation is relative measure of dispersion based on standard deviation. It is obvious that C.V. is independent in units. Hence, C.V. is suitable measure for comparing variability of two series (or set of data or distributions) with the same or different units.

It is calculated as under.
C.V. $=\frac{\sigma}{\overline{\mathrm{X}}} \times 100$

Where,
C.V. = Coefficient of Variation
$\sigma=$ Standard Deviation
$\overline{\mathrm{X}}=$ Arithmetic Mean.
For present study, C.V. is extremely useful in judging the scatterness or consistency of a mass figure in a series. A series with smaller C.V. is more consistent, more homogeneous \& more stable. On the other hand, higher C.V. is just opposite.

## vi. Correlation Analysis.

Correlation analysis measures the relationship between two or more variables. In other words, it helps us in analyzing the co-variation between two or more variables. In this study, it is used to find the relationship between total deposit \& total investment, interest earned \& interest paid and interest earned \& operating profit. By finding the relationship between the above mentioned variables, the researcher will able to know whether the variables are positive correlated or not. Symbolically, coefficient of correlation is denoted by ' $r$ ' and formula computing ' $r$ ' is.

Coefficient of Correlation ( r ) $=\frac{\Sigma \mathrm{d}_{\mathrm{x}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
Where,

$$
\begin{aligned}
& d_{X}=X-\bar{X} \\
& d_{y}=Y-\bar{Y}
\end{aligned}
$$

In stead of using coefficient of correlation, there is a tendency of using coefficient of determination. A coefficient of determination is a square of coefficient of correlation i.e. ( $r^{2}$ ). By calculating coefficient of determination a researcher will able to know what percentage change on dependent variable is explained by a change on independent variable.

## vii. Trend Analysis.

Different kind of tools can be used to identify the actual position of a business concern, out of which trend analysis is one which shows the percentage changes in several successive years instead of between two years. It reveals weather the current financial position of a company has improved over the past years or not. It shows which of the items have moved in favourable direction and which of them in unfavourable direction. So, this method is immensely helpful in making comparative study of financial statement of several years.

In this research work, this tool is used to find out the direction of changes of major activities such as deposit, net worth, investment, operating income, total expenses, net profit and interest earning. In comparison to first year (base year) of study growth trend of activities (i.e. deposit, net worth, investment etc.) for four successive years can calculated. We can use following formula to compute the index percentage of trend analysis.

$$
\text { Trend Percentage }=\frac{\text { Yearly Amount }}{\text { Base Year's Amount }} \times 100
$$

## Chapter - 4

## PRESENTATION \& ANALYSIS OF DATA

The present chapter entitled "Presentation \& Analysis of Data" has been introduced with a view to achieve research objectives. It makes a great deal of effort to assess the strength and weakness of NABIL, NIBL \& HBL, so it is the most important chapter of the study. In this chapter, information or data collected from secondary sources are properly presented and analyzed so that it can derive certain findings. Analysis is done by using some of the well accepted and important financial \& statistical tools, such tools are ratio and percentage, average and variation, correlation analysis, trend analysis. With the help of such tools the researcher aims to draw meaningful conclusion regarding financial performance of the concerned banks. The analysis is based on the financial statement of concerned banks for the fiscal year from 2060/61 to 2064/65.

## A. LIQUIDITY ANALYSIS.

Liquidity analysis examines the adequacy of funds, the solvency of the firm and the firm's ability to pay its obligation when they come due. It measures the firm's ability to meet short term obligations and reflects the short term financial strength of an enterprise.

In the word of Gitman, "Liquidity is a firm's ability to satisfy its short term obligation as they come due." (Gitman, J. Lawrance, 1988: 96)

In case of commercial banks short term obligations are current deposit, saving deposit \& short term loans and the most liquid fund to meet these obligation is cash and bank balance. If the firm is unable to meet its short term obligation due to lack of sufficient cash \& bank balance, it will give the result of bad credit rating \& loss of creditor's confidence. High liquidity also gives bad result as low profitability because of unnecessary tied of fund in current assets which become idle. So, there must be proper balance between degrees of liquidity. Different types of calculation have been used to measure the liquidity position of an enterprise. But in connection with commercial banks, NRB has directed to all the commercial banks to maintain the certain percentage of deposits as cash and bank balance for better liquidity position. As per NRB directives regarding maintenance of minimum liquidity effective from 2054 Chaitra, banks are required to maintain cash reserve as.

Cash in Vault<br>Balance to be maintained<br>With NRB

$3 \%$ of total deposit liabilities.
a. $8 \%$ of current and saving deposit liabilities
b. $6 \%$ of fixed deposit liabilities

In case of any deficit banks are penalized.
Symbolically,
Cash and bank balance required to maintain > Cash and bank balance maintained by bank $=$ Not liquid

Cash and bank balance required to maintain < Cash and bank balance maintained by bank $=$ Liquid

To find out the liquidity position of concerned banks viz. NABIL, NIBL \& HBL cash and bank balance maintained by these banks and cash balance required to maintain according to NRB directives have been presented below.

Table No. 4.1
Liquidity Position of NABIL,NIBL \& HBL

| Fiscal Year | NAB IL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash \& bank bal. maintained | Cash \& bank bal. req. to maintain | Ratio | Cash \& bank bal. maintained | Cash \& bank bal. req. to maintain | Ratio | Cash \& bank bal. maintained | Cash \& bank bal. req. to maintain | Ratio |
| 2060/61 | 812.90 | 1319.77 | 0.62 | 446.70 | 389.49 | 1.15 | 1435.18 | 1733.34 | 0.83 |
| 2061/62 | 1051.82 | 1226.07 | 0.86 | 338.92 | 347.13 | 0.98 | 1264.67 | 1831.30 | 0.69 |
| 2062/63 | 1144.77 | 1199.68 | 0.95 | 926.53 | 611.10 | 1.52 | 1979.21 | 1972.44 | 1.00 |
| 2063/64 | 970.49 | 1256.85 | 0.77 | 1226.92 | 994.32 | 1.23 | 2001.19 | 2215.33 | 0.90 |
| 2064/65 | 559.38 | 1348.35 | 0.41 | 1340.49 | 1283.30 | 1.04 | 2014.47 | 2542.67 | 0.79 |
|  |  | $\overline{\mathrm{X}}$ | 0.72 |  | $\overline{\mathrm{X}}$ | 1.18 |  | $\overline{\mathrm{X}}$ | 0.84 |
|  |  | $\sigma$ | 0.19 |  | $\sigma$ | 0.19 |  | $\sigma$ | 0.11 |
|  |  | C.V. | 26.28 |  | C.V. | 15.89 |  | C.V. | 12.48 |

Source: Annual Reports of NABIL, NIBL \& HBL.
In the Table No. 4.1, average liquidity position of NABIL, NIBL \& HBL are 0.72, $1.18 \& 0.84$ respectively which indicates that only NIBL has maintained the required level of cash \& bank balance during the study period. Where as NABIL \& HBL are unable to maintain the required level of cash and bank balance as required by NRB directives. HBL has maintained the required level of cash and bank balance only in the FY 2062/63. where as NABIL has not maintained the required level of cash and bank balance in any single year. So, these banks are penalized by NRB for not maintaining sufficient cash and bank balance. Hence from the liquidity point of view NIBL is maintaining enough cash \& bank balance but NABIL and HBL are poor from the view point of liquidity.

Similarly, coefficient of variation of liquidity position of NABIL, NIBL \& HBL are $26.28,15.89$ \& 12.48 respectively. Which signifies that HBL has more consistency in maintaining liquidity position compare to NIBL \& NABIL.NABIL has low conistency in maintaining liquidity position than NIBL.It refers that NABIL \& NIBL can not forecast suitable amount of cash for future transaction.

## B. DEPOSIT UTILIZATION.

Out of the various sources of fund, deposits are the main sources which the banks usually use for the generation of profit. The volume of deposits affects the bank's ability in making investment. Although bank seeks to invest their maximum deposits in profitable sector, they can't utilize their entire deposits because of NRB's regulation to maintain certain percentage of deposit as liquid cash. Hence, the major task of commercial banks is to collect deposits and efficient utilization of such collected deposits. Better deposit utilization indicates the better performance of the bank on their operation. Here, the researcher aims to know how the three banks i.e. NABIL, NIBL \& HBL are investing deposit and maintaining cash and bank balance with regard to total deposit, current deposit and total deposit (excluding fixed deposit).

## 1. Cash \& Bank Balance to Total Deposit:

Cash \& bank balance to total deposit analysis measures the availability of bank highly liquid funds to meet its unanticipated calls on different types of deposits. This analysis indicates the ability of banks funds to cover their current, saving, fixed, call \& other deposits. In addition to this, it also assess that what proportion of total deposit is utilized and what proportion of cash and bank balance remain. Low ratio percentage indicates the better utilization of deposits where as high ratio percentage shows the strong liquidity position of firm. But too high ratio percentage is not favourable for the bank because it provides adverse affects in profitability due to idleness of high interest bearing fund. This can be computed by using the following formula.
Cash \& Bank Balance to Total Deposit $=\frac{\text { Total Cash \& Bank Balance }}{\text { Total Deposit }} \times 100$
The following table presents the Cash \& Bank Balance to Total Deposit of NABIL, NIBL \& HBL.

Table No. 4.2
Cash \& Bank Balance to Total Deposit

|  |  |  |  | (Rs. In Million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year | NAB IL |  |  | NIB L |  |  | HBL |  |  |
|  | Cash \& Bank Balance | Total Deposit | Ratio (\%) | Cash \& Bank Balance | Total Deposit | Ratio (\%) | Cash \& Bank Balance | Total Deposit | Ratio <br> (\%) |
| 2060/61 | 812.90 | 15839.01 | 5.13 | 446.70 | 4256.21 | 10.50 | 1435.18 | 17532.40 | 8.19 |
| 2061/62 | 1051.82 | 15506.44 | 6.78 | 338.92 | 4174.76 | 8.12 | 1264.67 | 18619.37 | 6.79 |
| 2062/63 | 1144.77 | 13447.65 | 8.51 | 926.53 | 7922.75 | 11.69 | 1979.21 | 21007.37 | 9.42 |
| 2063/64 | 970.49 | 14119.03 | 6.87 | 1226.92 | 11524.67 | 10.65 | 2001.19 | 22010.34 | 9.09 |
| 2064/65 | 559.38 | 14586.61 | 3.83 | 1340.49 | 14254.57 | 9.40 | 2014.47 | 24814.00 | 8.12 |
|  |  | $\overline{\mathrm{X}}$ | 6.23 |  | $\overline{\mathrm{X}}$ | 10.07 |  | $\overline{\mathrm{X}}$ | 8.32 |
|  |  | $\sigma$ | 1.60 |  | $\sigma$ | 1.22 |  | $\sigma$ | 0.92 |
|  |  | c.v. | 25.77 |  | c.v. | 12.08 |  | c.v. | 11.02 |

Source: Annual Reports of NABIL, NIBL \& HBL
The comparative table no. 4.2 shows average cash and bank balance to total deposit ratio of NABIL,NIBL \& HBL are $6.23,10.07 \& 8.32$ respectively.It indicates that the average cash and bank balance to total deposit of NIBL is higher than that of HBL \& NABIL i.e. $10.07>8.32>6.23$. The difference of cash and bank balance to total deposit between NIBL \& HBL is $1.75 \%$ i.e. $(10.07 \%-8.32 \%)$ and difference between HBL and NABIL is $2.09 \%$ i.e. $(8.32 \%-6.23 \%)$. It means there is no significant difference between these banks. But difference between NIBL \& NABIL is 3.84 i.e. $(10.07 \%-6.23 \%)$, it indicates that these two banks differ significantly as regard cash and bank balance. Hence, it is quite obvious that the NIBL is less successful to utilize the fund of total deposit in comparison to NABIL \& HBL. The coefficient of variation of NABIL, NIBL \& HBL is $25.77 \%, 12.08 \%$ \& $11.02 \%$ respectively. As regard the consistency in maintaining cash \& bank balance to total deposit of HBL is more consistent than NABIL \& NIBL. Similarly, NIBL is more consistent than NABIL.

## 2. Cash \& Bank Balance to Total Deposit (Excluding Fixed Deposit):

Cash \& bank balance to total deposit (excluding fixed deposit) analysis measures the percentage of cash \& bank balance maintained by NABIL, NIBL \& HBL to honor the cheques presented by its depositors excluding fixed deposit. This analysis is also helpful to know the deposit utilization position of concerned banks excluding fixed deposit. High
ratio percentage represents greater ability to cover their deposits (excluding fixed one) and vice versa. However, too high ratio percentage is disadvantageous as capital is tied up in unproductive assets such as cash and bank balance.

Cash and bank balance to total deposit is calculated by dividing cash and bank balance by saving and current deposit or total deposit (excluding fixed deposit).

Cash \& Bank Balance to Total Deposit (Excluding Fixed Deposit) $=$
$\frac{\text { Total Cash \& Bank Balance }}{\text { Total Deposit (Excluding Fixed Deposit) }} \times 100$
Table No. 4.3
Cash \& Bank Balance to Total Deposit
(Excluding Fixed Deposit)
(Rs. In Million)

| Fiscal Year | NAB IL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cash \& Bank Balance | Total Deposit (excl. fixed) | Ratio (\%) | Cash \& Bank Balance | Total Deposit (excl. fixed) | Ratio (\%) | Cash \& Bank Balance | Total Deposit (excl. fixed) | Ratio (\%) |
| 2060/61 | 812.90 | 12119.81 | 6.71 | 446.70 | 2597.55 | 17.20 | 1435.18 | 12605.03 | 11.39 |
| 2061/62 | 1051.82 | 13059.59 | 8.05 | 338.92 | 3228.83 | 10.50 | 1264.67 | 13138.53 | 9.63 |
| 2062/63 | 1144.77 | 11195.11 | 10.23 | 926.53 | 6249.93 | 14.82 | 1979.21 | 17802.00 | 11.12 |
| 2063/64 | 970.49 | 11808.46 | 8.22 | 1226.92 | 9229.99 | 13.29 | 2001.19 | 17300.16 | 11.57 |
| 2064/65 | 559.38 | 12508.07 | 4.47 | 1340.49 | 11042.31 | 12.14 | 2014.47 | 18706.57 | 10.77 |
|  |  | $\overline{\mathrm{X}}$ | 7.54 |  | $\overline{\mathrm{X}}$ | 13.59 |  | $\overline{\mathrm{X}}$ | 10.89 |
|  |  | $\sigma$ | 1.90 |  | $\sigma$ | 2.29 |  | $\sigma$ | 0.69 |
|  |  | c.v. | 25.21 |  | c.v. | 16.87 |  | c.v. | 6.32 |

Source: Annual Reports of NABIL, NIBL \& HBL
Table No. 4.3 shows that the average cash \& bank balance to total deposit ratio(excluding fixed deposit) of NABIL, NIBL \& HBL is $7.54 \%, 13.59 \%$ and $10.89 \%$ respectively. It means NIBL is maintaining higher cash and bank balance than other two banks where as NABIL is maintaining lower cash and bank balance. It can be said that about $92 \%$ of such deposit is utilized in case of NABIL, where as it is $86 \%$ \& $89 \%$ in case of NIBL \& HBL respectively. Therefore, it is clear that NIBL is unable to mobilize its total deposit (excluding fixed one) to earn more profit where as NABIL has taken risk by investing its deposits to earn more profit.

As far as the consistency in maintaining cash and bank balance to total deposit ratio(excluding fixed deposit) is concerned, HBL is more consistent than the NABIL \& NIBL because its C.V. $6.32 \%$ is lower than that of NIBL $16.87 \%$ and NABIL $25.21 \%$. Similarly, NIBL is more consistent than NABIL.

## 3. Cash \& Bank Balance to Current Deposit:

This head of analysis measures the ability of banks immediate funds to cover their current deposits. Generally bank does not mobilize current deposit because such deposit can be called in any time. Current depositors must be paid whenever they demand payment, if it is not paid on their demand it will have adverse impact on the banks reputation. But some of the banks follow the policy of utilizing such deposits marginally. That means from liquidity point of view, mobilizing current deposit is risky but from
profitability point of view its shows better performance of utilizing such deposits. Cash \& bank balance to current deposit is calculated as follows.

$$
\text { Cash \& Bank Balance to Current Deposit }=\frac{\text { Total Cash \& Bank Balance }}{\text { Total Current Deposit }} \times 100
$$

If the ratio percentage is higher there is higher margin and if lower the bank said to be less liquid. The following table presents the Cash \& Bank Balance to Current Deposit of NABIL, NIBL \& HBL.

Table No. 4.4
Cash \& B ank Balance to Current Deposit

| Fiscal Year |  |  |  | (Rs. In Million) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NABIL |  |  | NIB L |  |  | HBL |  |  |
|  | Cash \& Bank Balance | Current <br> Deposit | Ratio (\%) | Cash \& Bank Balance | Current Deposit | Ratio (\%) | Cash \& Bank Balance | Current <br> Deposit | Ratio (\%) |
| 2060/61 | 812.90 | 2850.97 | 28.51 | 446.70 | 769.01 | 58.09 | 1435.18 | 2252.13 | 63.73 |
| 2061/62 | 1051.82 | 2703.82 | 38.90 | 338.92 | 785.40 | 43.15 | 1264.67 | 2634.37 | 48.01 |
| 2062/63 | 1144.77 | 3034.00 | 37.73 | 926.53 | 979.01 | 94.64 | 1979.21 | 3503.14 | 56.50 |
| 2063/64 | 970.49 | 2688.97 | 36.09 | 1226.92 | 1500.10 | 81.79 | 2001.19 | 4145.45 | 48.27 |
| 2064/65 | 559.38 | 2799.18 | 19.98 | 1340.49 | 1583.03 | 84.68 | 2014.47 | 5045.16 | 39.93 |
|  |  | $\overline{\mathrm{X}}$ | 32.24 |  | $\overline{\mathrm{X}}$ | 72.47 |  | $\overline{\mathrm{X}}$ | 51.29 |
|  |  | $\sigma$ | 7.12 |  | $\sigma$ | 18.94 |  | $\sigma$ | 8.13 |
|  |  | C.V. | 22.08 |  | c.v. | 26.14 |  | c.v. | 15.86 |

Source: Annual Reports of NABIL, NIBL \& HBL
The table no. 4.4 shows that the average cash and bank balance to current deposit ratio of NABIL, NIBL \& HBL are $32.24 \%, 72.47 \%$ \& $51.29 \%$ respectively. That means NIBL is holding more cash and bank balance with regard to current deposit than that of other two banks. But holding higher level idle amount of cash and bank balance can't be healthier to a bank. From the table, it can be state that NIBL has utilized some of the fund collected under current deposit only in the first two years of the study. Where as NABIL \& HBL have utilized the fund collected under current deposit during the entire study period. NABIL has utilized the funds $19 \%$ more than the HBL. As regard the consistency in maintaining cash and bank balance to current deposit ratio, HBL is more consistent that that of NABIL \& NIBL as their C.V. are $15.86 \%, 22.08 \%$ \& $26.14 \%$ respectively. From the above analysis, it can be said that NABIL has adopted the policy of utilizing the fund where as NIBL has adopted the policy of liquidity.

## C. ACTIVITY ANALYSIS:

Activity analysis is employed to evaluate the efficiency with which the firm manages and utilizes its assets. It is also called turnover analysis because they indicate the speed with which assets are being converted or turned over in to sales. In this connection Khan and Jain say, "An activity ratio may therefore be defined a test of the relationship between loans and advances and the total deposit." (Khan, M.Y., \& Jain, P.K., 1990: 117) This definition seems applicable to non manufacturing organization like bank, insurance company etc. because they provide services but no goods. Moreover, it indicates the speed of collection of funds and utilization of those funds to increase revenue by providing loans and advances, investments and other service rendered by banks. This analysis is related with measuring the efficiency in assets management as well as the effectiveness of the investment of resources in the business concern. With the help of this analysis, we can
easily know whether the funds have been used effectively or not. In this regard Scall and Haly say, "Activity ratio indicate how effectively the firm is using its assets or deposit amounts." (Scall, L.D., \& C.W., Haly, $6^{\text {th }}$ edition: 385)

Under this analysis the effectiveness of assets utilization is judged in terms of fund structure, deposit structure, investment structure, total investment to total deposit, loan and advance to total deposit and loan and advance to fixed deposit which are described as follows.

## 1. Fund Structure:

Bank can generate funds from various sources such as deposits, loans, borrowings and net worth. Among them net worth and total deposit are the main sources of fund of commercial banks. Net worth denotes the insider (shareholder's) fund which includes paid up capital, reserve \& surplus and undistributed profit. Where as total deposit denotes the outsider (depositor's) fund which includes current deposit, saving deposit, fixed deposit and call \& other deposit. Net worth or shareholder's fund plays vital role in supporting its daily operation and ensuring the long term fund mobilization. Deposit from the public constitutes the major portion of bank's working capital. Fund structure measures the proportion of total deposit and net worth of NABIL, NIBL \& HBL in their total fund. Short term loan is also a source of fund but both banks are either not raising money or raising in small volume from such source. So it is not included in this analysis. Fund structure of these concerned banks is presented as below.

Table No. 4.5
Fund Structure of NABIL, NIBL \& HBL

| Fiscal <br> Year |  |  |  | NAB IL |  | NIB L |  | HB In Percentage) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | Total Deposit | Net Worth | Total Deposit | Net Worth | Total Deposit | Net Worth |  |  |  |
| $2061 / 62$ | 93.71 | 6.29 | 90.07 | 9.93 | 96.05 | 3.95 |  |  |  |
| $2062 / 63$ | 91.12 | 6.88 | 88.86 | 11.14 | 95.59 | 4.41 |  |  |  |
| $2063 / 64$ | 90.50 | 8.90 | 92.54 | 7.46 | 95.18 | 4.82 |  |  |  |
| $2064 / 65$ | 89.80 | 9.50 | 94.05 | 5.95 | 94.33 | 5.67 |  |  |  |
| $\overline{\mathrm{X}}$ | 91.64 | 10.20 | 92.35 | 7.65 | 94.15 | 5.85 |  |  |  |
| $\sigma$ | 1.51 | 1.36 | 91.58 | 8.42 | 95.06 | 4.94 |  |  |  |
| C.V. | 1.65 | 18.12 | 1.86 | 1.86 | 0.73 | 0.73 |  |  |  |

Source: Annual Reports of NABIL, NIBL \& HBL.
Table no. 4.5 shows the proportion of total deposit and net worth of NABIL, NIBL \& HBL along with their average, standard deviation and coefficient of variation during the study period.

The average of total deposit to total fund ratio of NABIL, NIBL \& HBL is $91.64 \%, 91.58 \%$ and $95.06 \%$ respectively. It shows HBL has the higher average percentage of total deposit than that of NABIL and NIBL. But to the context of NABIL and NIBL both banks have identical average percentage of total deposit. NABIL has slightly higher average percentage of total deposit than that of NIBL (i.e. $91.64 \%$ > 91.58\%).

The average percentage of net worth to total fund ratio of NABIL, NIBL \& HBL is $8.36 \%, 8.42 \%$ and $4.94 \%$ respectively. It means there is no significant difference between NABIL and NIBL in terms of net worth. Where as HBL has lower average percentage of net worth to total fund than that of NABIL \& NIBL. It shows that NABIL and NIBL use more fund from shareholders than deposits compared to HBL. This indicates that NABIL and NIBL are comparatively less risky than HBL.

From the view point of C.V. analysis it is known that variance of total deposit to total fund ratio of $\operatorname{HBL}(0.77 \%)$ is lower than NABIL ( $1.65 \%$ ) and NIBL $(2.03 \%)$, which indicates that HBL is more consistent than NABIL, and NABIL is more consistent than

NIBL in maintaining total deposit in their total funds. Similarly, C.V. of net worth to total fund ratio of HBL (14.75\%) is lower than NABIL (18.12\%) and NIBL (22.08\%) which indicates HBL is more consistent than NABIL, and NABIL is more consistent than NIBL in maintaining net worth in their total fund.

## 2. Deposit Structure:

Deposit refers to those amounts which are received by bank from its depositors. The growth of the banks primarily depends upon the growth of its deposits. This is because the volume of funds that management uses to generate income through investment is determined largely by the banks policy governing deposits. Banks maintain different types of deposit accounts to attract different types of depositors. Broadly such deposits are fixed, saving, current and call \& other. Generally, deposit collected under fixed account can used to finance medium and short term loan. But it will be risky to utilize the funds collected under current account because such types of deposit can be called at any time. Although some of the bank adopt the policy of utilizing such deposit marginally to finance very short term loan. Thus it is the nature of deposit structure that determines the lending pattern of the bank. The deposit structure also determines the liquidity policy of the bank. According to NRB directives, bank with the higher proportion of fixed deposit in its total deposit structure needs to maintain lower percentage of the total deposit as cash and bank balance. But bank with higher proportion of saving and current deposit in total deposit structure needs to maintain higher percentage of total deposit as cash and bank balance.

Here, the researcher aims to compare the proportion of various types of deposit to total deposit. This is computed by dividing individual deposit by total deposit.

Table No. 4.6 Deposit Structure of NABIL

| Fiscal Year | Current Deposit | Saving Deposit | Fixed Deposit | Call \& Other <br> Deposit |
| :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | 18.00 | 31.04 | 23.48 | 27.47 |
| $2061 / 62$ | 17.44 | 32.06 | 15.78 | 34.72 |
| $2062 / 63$ | 22.56 | 38.89 | 16.75 | 21.80 |
| $2063 / 64$ | 19.05 | 42.45 | 16.36 | 22.14 |
| $2064 / 65$ | 19.19 | 48.17 | 14.25 | 18.39 |
| $\overline{\mathrm{X}}$ | 19.25 | 38.52 | 17.33 | 24.90 |
| $\sigma$ | 1.78 | 6.42 | 3.19 | 5.70 |
| C.V. | 9.25 | 16.67 | 18.43 | 22.90 |

Source: Annual Reports of NABIL
Table No. 4.7
Deposit Structure of NIBL

| Fiscal Year | Current Deposit | Saving Deposit | Fixed Deposit | Call \& Other <br> Deposit |
| :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | 18.07 | 29.59 | 38.97 | 13.37 |
| $2061 / 62$ | 18.81 | 30.63 | 22.66 | 27.90 |
| $2062 / 63$ | 12.36 | 30.72 | 21.11 | 35.81 |
| $2063 / 64$ | 13.02 | 42.40 | 19.91 | 24.68 |
| $2064 / 65$ | 11.11 | 47.03 | 22.53 | 19.33 |
| $\bar{X}$ | 14.67 | 36.07 | 25.04 | 24.22 |
| $\sigma$ | 3.15 | 7.21 | 7.04 | 7.61 |
| C.V. | 21.45 | 20.00 | 28.11 | 31.43 |

[^0]Table No. 4.8
Deposit Structure of HBL

| Fiscal Year | Current Deposit | Saving Deposit | Fixed Deposit | Call \& Other <br> Deposit |
| :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | 12.85 | 52.16 | 28.10 | 6.89 |
| $2061 / 62$ | 14.15 | 49.22 | 29.44 | 7.20 |
| $2062 / 63$ | 16.68 | 51.75 | 15.26 | 16.32 |
| $2063 / 64$ | 18.83 | 53.43 | 21.40 | 6.34 |
| $2064 / 65$ | 20.33 | 51.79 | 24.61 | 3.26 |
| $\bar{X}$ | 16.57 | 51.67 | 23.76 | 8.00 |
| $\sigma$ | 2.79 | 1.37 | 5.09 | 4.39 |
| C.V. | 16.86 | 2.65 | 21.43 | 54.85 |

Source: Annual Reports of HBL.
Table No.:- 4.6, 4.7 \& 4.8 show the deposit structure of NABIL, NIBL \& HBL along with their average and variation during the study period.

The average current deposit to total deposit ratio of NABIL, NIBL \& HBL is $19.25 \%, 14.67 \%$ \& $16.57 \%$ respectively. This means NABIL has higher percentage of average than other two banks by $4.58 \%$ and $2.68 \%$ respectively. Similarly, HBL has higher percentage of average than NIBL by $1.9 \%$

The average saving deposit to total deposit ratio of NABIL, NIBL and HBL is $38.52 \%, 36.07 \%$ and $51.67 \%$ respectively. This means HBL has higher percentage of average than NABIL and NIBL by $13.15 \%$ and $15.6 \%$ respectively. Similarly, NABIL has slightly higher percentage of average than NIBL i.e.2.45\%

The average fixed deposit to total deposit ratio of NABIL, NIBL and HBL is $17.33 \%, 25.04 \%$ and $23.76 \%$ respectively. This means NIBL has higher percentage of average than NABIL and HBL by $7.71 \%$ and $1.28 \%$ respectively. Similarly, HBL has higher percentage of average than NABIL by $6.43 \%$.

The average call \& other deposit to total deposit ratio of NABIL, NIBL and HBL is $24.9 \%, 24.22 \%$ and $8.00 \%$ respectively. This means HBL has lower percentage of average than NABIL and NIBL by $16.9 \%$ and $16.22 \%$ respectively. But there is no any significant difference between NABIL \& NIBL, which is only $0.68 \%$.

The deposit structure of NABIL, NIBL \& HBL indicates that NIBL has higher proportion of fixed deposit than that of NABIL and HBL. So NIBL is more capable of financing long term loan than NABIL and HBL. Similarly, HBL has higher proportion of saving deposit than that of NABIL \& NIBL. So, HBL is more capable of financing medium \& short term loan.

As far as the consistency in deposit structure is concerned. NABIL is more consistent or uniform than NIBL \& HBL in case of current, fixed and call \& other deposit. But in case of saving deposit HBL is more consistent than other two banks.

## 3. Investment Structure

Investment structure measures the proportion of different investment to total investment of the banks. Generally, investment refers to those amounts of funds which generate income to the bank; loans and advances, purchase and discount of bills, cash credit and overdraft, investment in government securities, bond, debenture \& shares, investment in foreign banks, investment on other well established company etc. are such investment.

It is very necessary that banks should invest their funds in higher productive sector. In banks there are two types of fund available for investment i.e. net worth and deposits. The investment policy of banks is highly influenced by the nature of funds available for its investment. A sound investment policy of a bank is such that its funds are distributed on different types of assets with good profitability on one hand and provides maximum safety
and security on other hand. Thus the bank should invest its funds in such a way as to secure for itself and receive adequate and permanent income.

Here, the investment structure of NABIL, NIBL \& HBL is presented below in which investment in shares $\&$ debenture by these banks are not included because there is no significant growth in investment in shares and debenture as there is growth in total deposits. So, in this study investment refers to loans, advances \& overdraft, bills purchase and discount, money at call \& short notice, investment in government securities \& other investment (which includes investment in foreign banks, local banks, mutual funds etc.) the proportion of various types of investment with total investment of these banks (NABIL, NIBL \& HBL) are analyzed and presented as follows.

Table No. 4.9
Investment Structure of NAB IL

| Fiscal <br> Year | Money at call <br> and short <br> notice | Loans, <br> advances and <br> overdrafts | Bills purchase <br> and discount | Government <br> securities | Other <br> Investments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | 3.16 | 48.35 | 2.00 | 16.53 | 29.96 |
| $2061 / 62$ | 0.20 | 45.60 | 1.93 | 26.33 | 25.93 |
| $2062 / 63$ | 4.64 | 51.64 | 2.09 | 24.86 | 16.77 |
| $2063 / 64$ | 6.16 | 53.30 | 1.58 | 24.61 | 14.35 |
| $2064 / 65$ | 5.53 | 66.68 | 0.77 | 15.38 | 11.63 |
| $\overline{\mathrm{X}}$ | 3.94 | 53.11 | 1.68 | 21.54 | 19.73 |
| $\sigma$ | 2.12 | 7.29 | 0.48 | 4.61 | 7.02 |
| C.V. | 53.90 | 13.72 | 28.90 | 21.42 | 35.58 |

Source: Annual Reports of NABIL.
Table No. 4.10
Investment Structure of NIBL

| Fiscal <br> Year | Money at call <br> and short <br> notice | Loans, <br> advances and <br> overdrafts | Bills purchase <br> and discount | Government <br> securities | Other <br> Investments |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $2060 / 61$ | 0.00 | 52.86 | 2.51 | 6.84 | 37.79 |
| $2061 / 62$ | 0.00 | 57.59 | 1.06 | 5.13 | 36.22 |
| $2062 / 63$ | 0.53 | 75.27 | 1.65 | 5.33 | 17.21 |
| $2063 / 64$ | 2.75 | 61.28 | 1.88 | 17.73 | 16.37 |
| $2064 / 65$ | 0.99 | 70.04 | 1.36 | 13.74 | 13.88 |
| $\overline{\mathrm{X}}$ | 0.85 | 63.41 | 1.69 | 9.75 | 24.29 |
| $\sigma$ | 1.02 | 8.18 | 0.49 | 5.08 | 10.45 |
| C.V. | 119.05 | 12.90 | 29.12 | 52.05 | 43.01 |

Source: Annual Reports of NIBL.
Table No. 4.11
Investment Structure of HBL

| Fiscal <br> Year | Money at call <br> and short <br> notice | Loans, <br> advances and <br> overdrafts | Bills purchase <br> and discount | Government <br> securities | Other <br> Investments |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 23.67 | 50.46 | 2.12 | 12.97 | 10.78 |
|  | 1.92 | 47.06 | 1.41 | 16.57 | 33.04 |
| $2062 / 63$ | 0.74 | 47.80 | 1.48 | 19.71 | 30.27 |
| $2063 / 64$ | 1.71 | 53.92 | 1.47 | 15.90 | 27.00 |
| $2064 / 65$ | 1.80 | 49.31 | 1.37 | 22.31 | 25.22 |
| $\overline{\mathrm{X}}$ | 5.97 | 49.71 | 1.57 | 17.49 | 25.26 |
| $\sigma$ | 8.86 | 2.41 | 0.28 | 3.22 | 7.72 |
| C.V. | 148.50 | 4.86 | 17.67 | 18.42 | 30.58 |

Source: Annual Reports of HBL.

Table no. $4.9,4.10 \& 4.11$ show the investment structure of NABIL, NIBL \& HBL along with their average and variation. The average investment on money at call and short notice of NABIL, NIBL \& HBL is $3.94 \%, 0.85 \%$ and $5.97 \%$ respectively. It means HBL has invested more amount of fund on money at call \& short notice than NABIL \& NIBL., and NABIL has invested more amount of fund on money at call and short notice than NIBL.

The average investment on loans, advances \& overdrafts of NABIL, NIBL \& HBL is $53.11 \%, 63.41 \%$ \& $49.71 \%$ respectively. It shows that large proportion of funds is invested on loans, advances \& overdrafts by these banks compared to other types of investment. Higher percentage of average of NIBL reflects that NIBL has invested its funds significantly more on loans, advances \& overdrafts than NABIL and HBL. Similarly, the average bills purchase and discount of NABIL, NIBL \& HBL is $1.68 \%, 1.69 \%$ and $1.57 \%$ respectively. It indicates that two banks (NABIL \& NIBL) has invested their funds on bills purchase and discount almost identically. But HBL has invested slightly lower than NABIL and NIBL (i.e. by $0.11 \% \& 0.12 \%$ ) on bills purchase and discount.

The average investment on government securities of NABIL, NIBL \& HBL is $21.54 \%, 9.75 \%$ \& $17.49 \%$ respectively. Here, NABIL has higher percentage of average than NIBL \& HBL which indicates that NABIL invested more funds on government securities than NIBL \& HBL. HBL stand second position in this regard. Similarly, average investment on other investment of NABIL, NIBL \& HBL is $19.73 \%$, $24.29 \%$ \& $25.26 \%$ respectively. That means HBL has invested more funds on other investment than NABIL \& NIBL, and NIBL has invested more amount of funds on other investment than NABIL.

As far as the consistency in investment structure is concerned. NABIL is more consistent or uniform than NIBL \& HBL in case of investing on money at call \& short notice. But in case of investing on loans, advances \& overdrafts, bills purchase \& discount, government securities and other investment HBL is more consistent or uniform than other two banks.

## 4. Total Investment to Total Deposit

This head of analysis measures that how successfully the banks are mobilizing their deposits on investment. Here, the investment includes investment on loans, cash credit and overdraft, government securities, bills purchase and discount, money at call and short notice where as total deposit includes current, fixed, saving and call \& other deposits. It also assesses the company's financing policy. If they don't have good financing policy, then they can't earn proper return.

It is calculated by using the following formula.
Total Investment to Total Deposit $=\frac{\text { Total Investment }}{\text { Total Deposit }} \times 100$
Total investment to total deposit of three selected banks is calculated and presented as below.

Table No. 4.12
Total Investment to Total Deposit
(Rs. In Million)

| Fiscal Year | NABIL |  |  | NIBL |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Investment | Total Deposit | Ratio (\%) | Total Investment | Total Deposit | Ratio (\%) | Total Investment | Total Deposit | Ratio (\%) |
| 2060/61 | 16532.48 | 15839.01 | 104.38 | 4386.61 | 4256.21 | 103.06 | 17145.47 | 17532.40 | 97.79 |
| 2061/62 | 15646.56 | 15506.44 | 100.90 | 4372.70 | 4174.76 | 104.74 | 18388.92 | 18619.37 | 98.76 |
| 2062/63 | 14435.10 | 13447.65 | 107.34 | 7503.49 | 7922.75 | 94.71 | 20293.12 | 21007.37 | 96.60 |
| 2063/64 | 14922.57 | 14119.03 | 105.69 | 11288.72 | 11524.67 | 97.95 | 21578.61 | 22010.34 | 98.04 |
| 2064/65 | 15694.47 | 14586.61 | 107.60 | 14182.50 | 14254.57 | 99.49 | 24518.03 | 24814.00 | 98.81 |
|  |  | $\overline{\mathrm{X}}$ | 105.18 |  | $\overline{\mathrm{X}}$ | 99.99 |  | $\overline{\mathrm{X}}$ | 98.00 |
|  |  | $\sigma$ | 2.44 |  | $\sigma$ | 3.59 |  | $\sigma$ | 0.80 |
|  |  | C.V. | 2.32 |  | c.v. | 3.59 |  | c.v. | 0.82 |

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.12 shows the computation of total investment to total deposit ratio of NABIL, NIBL \& HBL along with their average and deviation. The average investment to total deposit of NABIL ( $105.18 \%$ ) is greater than that of NIBL (99.99\%) and HBL ( $98.00 \%$ ) by $5.19 \%$ and $7.18 \%$ respectively. Similarly, NIBL has greater average by $1.99 \%$ than that of HBL. This indicates that NABIL has utilized its total deposits for investment purpose more efficiently than NIBL \& HBL. Likewise, NIBL is more capable in utilizing its resources on investment than HBL. Not only this, NABIL has invested excess amount than total deposit in the whole study period. Where as NIBL has able to invest excess amount than total deposit only in first two years of the study. HBL has not invested excess amount than total deposit.

Similarly, C.V. on total investment to total deposit ratio of HBL ( $0.82 \%$ ) shows that HBL is more consistent in mobilizing total deposit on investment than NABIL (2.32\%) and NIBL ( $3.59 \%$ ) and NABIL is more consistent than NIBL in this regard.

## 5. Loans and advances to Total Deposit.

Loans and advances to total deposit examines to what extent commercial banks are able to utilize the depositor's fund to earn profit by providing loans and advances. It is computed by dividing total amount of loans and advances by total depositor's fund. Total deposit includes current, saving, fixed, call \& other deposit. High ratio percentage represents the greater efficiency or proper utilization of funds provided by the outsiders i.e. deposits. But very high percentage shows poor liquidity position and risk in loans. On the contrary, too low percentage may be cause of idle cash or use of fund in lower productive sector.

It can be calculated as follows.

$$
\text { Loans and advances to Total Deposit }=\frac{\text { Total Loans and Advances }}{\text { Total Deposit }} \times 100
$$

Table No. 4.13
Loans \& Advances to Total Deposit

| Fiscal <br> Year | NAB IL |  |  | NIB L |  |  | HB L |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  <br> advances | Total <br> Deposit | Ratio <br> (\%) |  <br> advances | Total <br> Deposit | Ratio <br> (\%) |  <br> advances | Total <br> Deposit | Ratio <br> (\%) |  |
| $2060 / 61$ | 7993.28 | 15839.01 | 50.47 | 2318.91 | 4256.21 | 54.48 | 8651.74 | 17532.40 | 49.35 |  |
| $2061 / 62$ | 7135.54 | 15506.44 | 46.02 | 2518.06 | 4174.76 | 60.32 | 8653.57 | 18619.37 | 46.48 |  |
| $2062 / 63$ | 7454.26 | 13447.65 | 55.43 | 5648.03 | 7922.75 | 71.29 | 9700.66 | 21007.37 | 46.18 |  |
| $2063 / 64$ | 7953.76 | 14119.03 | 56.33 | 6917.80 | 11524.67 | 60.03 | 11635.31 | 22010.34 | 52.86 |  |
| $2064 / 65$ | 10465.27 | 14586.61 | 71.75 | 9933.08 | 14254.57 | 69.68 | 12088.71 | 24814.00 | 48.72 |  |
|  |  | $\overline{\mathrm{X}}$ | 56.00 |  | $\overline{\mathrm{X}}$ | 63.16 |  | $\overline{\mathrm{X}}$ | 48.72 |  |
|  |  | $\sigma$ | 8.70 |  | $\sigma$ | 6.35 |  | $\sigma$ | 2.41 |  |
|  |  | C.V. | 15.54 |  | C.V. | 10.06 |  | C.V. | 4.95 |  |

Source: Annual Reports of NABIL, NIBL \& HBL

Table No. 4.13 shows the percentage of loan \& advances to total deposit ratio of these banks are in fluctuating trend. The average loan \& advances to total deposit proportion of NIBL $(63.16 \%)$ is greater than that of NABIL ( $56.0 \%$ ) and HBL ( $48.72 \%$ ) by $7.16 \%$ \& $1.44 \%$ respectively. It indicates NIBL's better utilization of total deposit for investing in loans and advances in comparison to NABIL \& HBL. Higher average of NABIL in comparison to HBL shows better performance of NABIL in utilization of total deposit for investing in loans and advances than HBL.

The C.V. of NABIL, NIBL and HBL is $15.54 \%, 10.06 \%$ and $4.95 \%$ respectively. This indicates that HBL is more consistent in loans and advances to total deposit ratio as regard NABIL \& NIBL. Similarly, NIBL is more consistent than NABIL in this regard.

## 6. Loans and advances to Total Deposit (Excluding Current Deposit).

This analysis measures the proportion of total deposit (excluding current deposit) used for investing loans and advances. Investing current deposit in such investment like loans and advances will be riskier because those types of deposits can be called in any time. On the other hand, fixed \& saving deposits have interest bearing liability therefore they need to be invested in productive sector. Loans and advances are the primary source of income and the most profitable of all the assets of the bank. Therefore, utilization of fixed and saving deposit in loans and advances shows the greater performance of the bank. It is calculated by using following formula.

[^1]Table No. 4.14
Loans \& Advances to Total Deposit
(Excluding Current Deposit)

| Fiscal Year |  |  |  |  |  |  |  | (Rs. In | iillion) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NAB IL |  |  | NIB L |  |  | HBL |  |  |
|  | Loans \& advances | Total Deposit | Ratio (\%) | Loans \& advances | Total Deposit | Ratio (\%) | Loans \& advances | Total Deposit | Ratio (\%) |
| 2060/61 | 7993.28 | 12988.04 | 61.54 | 2318.91 | 3487.20 | 66.50 | 8651.74 | 15280.27 | 56.62 |
| 2061/62 | 7135.54 | 12802.62 | 55.73 | 2518.06 | 3389.36 | 74.29 | 8653.57 | 15985.00 | 54.14 |
| 2062/63 | 7454.26 | 10413.65 | 71.58 | 5648.03 | 6943.74 | 81.34 | 9700.66 | 17504.23 | 55.42 |
| 2063/64 | 7953.76 | 11430.06 | 69.59 | 6917.80 | 10024.57 | 69.01 | 11635.31 | 17864.89 | 65.13 |
| 2064/65 | 10465.27 | 11787.43 | 88.78 | 9933.08 | 12671.54 | 78.39 | 12088.71 | 19768.84 | 61.15 |
|  | $\overline{\mathrm{X}}$ |  | 69.45 | $\overline{\mathrm{X}}$ |  | 73.91 | $\overline{\mathrm{X}}$ |  | 58.49 |
|  | $\sigma$ |  | 11.22 | $\sigma$ |  | 5.56 |  | $\sigma$ | 4.08 |
|  | C.V. |  | 16.15 | c.v. |  | 7.52 | C.V. |  | 6.97 |

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.14 shows the percentage of loans and advances to total deposit ratio(excluding current deposit) of NABIL, NIBL \& HBL is $69.45 \%, 73.91 \%$ and $58.49 \%$ respectively. It indicates that NIBL has higher percentage of average than NABIL and HBL. Similarly, NABIL has greater average than that of HBL.

Lower C.V. of HBL(6.97\%) indicates that HBL is more consistent in utilizing its total deposit (excluding current deposit) in loans and advances in comparison to $\operatorname{NABIL}(16.15 \%) \& \operatorname{NIBL}(7.52 \%)$. Likewise, NIBL is more consistent than NABIL in this regard.

The analysis reveals that NIBL has utilized proficiently its fixed and saving deposit in investing loans and advances in comparison to NABIL and HBL. Where as NABIL has utilized its fixed \& saving deposit efficiently in investing loans and advances than HBL.

## D. PROFITABILITY ANALYSIS.

Bank is a business institution whose prime objective is to earn maximum profit. It is because, for any business field profit is essential for its successful operation and further expansion. It is the key factor that measures how effectively the firm is being operated and managed. Moreover, it measures the earning power and management overall effectiveness. It is regarded as the engine that derives the business and indicates economic progress.

Profitability is the net end result of a number of corporate policies and decisions. "Profitability analysis essentially related to the profit earned by an enterprise during a particular period to various parameters like sales, shareholders equity, capital employed and total assets." (Bhattacharya, S.K., \& Derdon, Johan, 1980: 283)

Profitability analysis is designed to provide answer to basically the following questions.

- Does the firm earn adequate profit?
- What rate of return does it represent?
- What is the rate or return to equity shareholders?
- What is the rate of profit for various division and segments of the firm? And so on.

Generally, an organization which earns more profit is regarded as successful one. But sometimes the volume of profit does not give the clear picture of an organization until it is connected with some other major variables. Here an attempt is made to analyze the capacity of return of these banks in relation to different major variables such as net worth, deposits, investment etc.

## 1. Return on Net Worth.

Return on net worth is an important measurement from the owner's point of view. It measures whether the bank has earned satisfactory return on its equity or not. Moreover, it reflects how well the firm has used the resources of owners. It is tested to see the profitability of the owner's investment Return on net worth is of great interest to present as well as prospective shareholders and also of great significance to management, which has responsibility of maximizing the owner's welfare. It is calculated by using following formula.

$$
\text { Return on Net Worth }=\frac{\text { Net Profit After Tax }}{\text { Net Worth }} \times 100
$$

Return on Net worth of three selected banks is calculated and presented as below.

Table No. 4.15
Return on Net Worth

| Fiscal Year | NABIL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NPAT | Net Worth | Ratio (\%) | NPAT | Net Worth | Ratio (\%) | NPAT | Net Worth | Ratio (\%) |
| 2060/61 | 291.37 | 1062.83 | 27.41 | 56.41 | 469.08 | 12.03 | 280.69 | 720.60 | 38.95 |
| 2061/62 | 271.63 | 1146.42 | 23.69 | 57.10 | 523.46 | 10.91 | 235.02 | 858.13 | 27.39 |
| 2062/63 | 416.25 | 1314.18 | 31.67 | 116.82 | 638.53 | 18.30 | 212.12 | 1063.14 | 19.95 |
| 2063/64 | 455.32 | 1481.68 | 30.73 | 152.67 | 729.04 | 20.94 | 263.05 | 1324.17 | 19.87 |
| 2064/65 | 518.63 | 1657.63 | 31.29 | 232.15 | 1180.17 | 19.67 | 308.28 | 1541.75 | 20.00 |
|  |  | $\overline{\mathrm{X}}$ | 28.96 |  | $\overline{\mathrm{X}}$ | 16.37 |  | $\overline{\mathrm{X}}$ | 25.23 |
|  |  | $\sigma$ | 3.03 |  | $\sigma$ | 4.10 |  | $\sigma$ | 7.44 |
|  |  | C.V. | 10.48 |  | c.v. | 25.07 |  | c.v. | 29.5 |

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.15 shows the amount and the proportion of NPAT to net worth of NABIL, NIBL \& HBL during the study period. The average return on net worth of NABIL, NIBL \& HBL is $28.96 \%, 16.37 \%$ and $25.23 \%$ respectively. The average of NABIL is higher than that of NIBL \& HBL. On the other hand, HBL has higher average than that of NIBL. It shows that NABIL has utilized its shareholder's fund more efficiently in profit generating purpose than the NIBL \& HBL. Similarly, HBL is more efficient than NIBL in this regard.

Coefficient of variation in return on net worth of NABIL ( $10.48 \%$ ) is lower than NIBL ( $25.07 \%$ ) and HBL ( $29.5 \%$ ). This shows that NABIL is more consistent to earn return on its shareholder's equity in comparison to NIBL \& HBL. Lower C.V. of NIBL indicates that it is more consistent than HBL.

From the above analysis, it is quite clear that NABIL is more consistent as well as more efficient to yield return on its shareholder's equity than the other two banks.

## 2. Return on Total Deposit

Return on total deposit shows the percentage of profit earned from the utilization of total deposit of the banks. It also measures bank's efficiency towards its deposit mobilization. Here, total deposit includes current, fixed, saving, call \& other deposit. Generally, high percentage is the index of strong profitability position and vice versa.

It is calculated by using following formula.
Return on Total Deposit $=\frac{\text { Net Profit After Tax }}{\text { Total Deposit }} \times 100$
Return on total deposit of NABIL, NIBL \& HBL is tabulated below.
Table No. 4.16
Return on Total Deposit

| $\begin{array}{c}\text { Fiscal } \\ \text { Year }\end{array}$ | $\begin{array}{c}\text { NAB IL } \\ \text { NPAT } \\ \text { Total } \\ \text { Deposit }\end{array}$ |  |  |  | $\begin{array}{c}\text { Ratio } \\ \text { (\%) }\end{array}$ | NPAT | $\begin{array}{c}\text { Total } \\ \text { Deposit }\end{array}$ | $\begin{array}{c}\text { Ratio } \\ \text { (\%) }\end{array}$ | NPAT |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: | \(\left.\begin{array}{c}Total <br>

Deposit\end{array} $$
\begin{array}{c}\text { Ratio } \\
\text { (\%) }\end{array}
$$\right]\)

Source: Annual Reports of NABIL, NIBL \& HBL
Table No. 4.16 shows that the percentage of return on total deposit of NABIL, NIBL \& HBL has a fluctuating trend over the study period. The average percentage of NPAT to total deposit ratio of NABIL, NIBL \& HBL is $2.69 \%, 1.42 \%$ and $1.26 \%$ respectively. Higher average of NABIL indicates that it is more efficient to utilize its total deposit for profit yielding purpose in comparison to NIBL \& HBL. NIBL stands second in this regard.

On the basis of coefficient of variation in NPAT to total deposit ratio, there is a fluctuation of $27.8 \%, 8.14 \%$ and $15.17 \%$ during the study period for NABIL, NIBL \& HBL respectively. It indicates that NIBL is more uniform to earn on its total deposit than NABIL \& HBL. While HBL is more uniform than NABIL in this regard.

## 3. Return on Total Investment

This head of analysis measures the proportion of return earned by the bank on its total investment. It measures whether the banks have earned satisfactory return on their total investment or not. Moreover, it reflects how well the firm has invested their funds for profit generating purpose. In other words, it assesses the investment policy of the firm. High ratio percentage represents the appropriate investment policy for profit generating purpose and vice versa.

It is calculated by using following formula.
Return on Total Investment $=\frac{\text { Net Profit After Tax }}{\text { Total Investment }} \times 100$
Return on total investment of NABIL, NIBL \& HBL is presented as below.

Table No. 4.17
Return on Total Investment

| Fiscal Year | NAB IL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NPAT | Total Investment | Ratio (\%) | NPAT | Total Investment | Ratio <br> (\%) | NPAT | Total Investment | Ratio (\%) |
| 2060/61 | 291.37 | 7704.31 | 3.78 | 56.41 | 1970.27 | 2.86 | 280.69 | 4083.16 | 6.87 |
| 2061/62 | 271.63 | 8199.51 | 3.31 | 57.10 | 1822.16 | 3.13 | 235.02 | 9157.11 | 2.57 |
| 2062/63 | 416.25 | 6031.17 | 6.90 | 116.82 | 1705.24 | 6.85 | 212.12 | 10175.44 | 2.08 |
| 2063/64 | 455.32 | 5836.07 | 7.80 | 152.67 | 3862.48 | 3.95 | 263.05 | 9292.11 | 2.83 |
| 2064/65 | 518.63 | 4267.23 | 12.15 | 232.15 | 3934.19 | 5.90 | 308.28 | 11692.34 | 2.64 |
|  |  | $\overline{\mathrm{X}}$ | 6.79 |  | $\overline{\mathrm{X}}$ | 4.54 |  | $\overline{\mathrm{X}}$ | 3.40 |
|  |  | $\sigma$ | 3.19 |  | $\sigma$ | 1.57 |  | $\sigma$ | 1.76 |
|  |  | c.v. | 47.01 |  | c.v. | 34.58 |  | c.v. | 51.64 |

Source: Annual Reports of NABIL, NIBL \& HBL
Table No. 4.17 shows the percentage of return on total investment of NABIL, NIBL \& HBL along with their average and variation. The average return on total investment of NABIL, NIBL \& HBL is $6.79 \%, 4.54 \% ~ \& ~ 3.40 \%$ respectively. That means the average percentage of NABIL is higher than that of NIBL \& HBL by $2.25 \%$ \& $3.39 \%$ respectively. Higher average of NABIL indicates that it is more efficient to invest its funds for profit generating purpose in comparison to NIBL \& HBL. NIBL stands second in this regard.

On the basis of coefficient of variation, there is a fluctuation of $47.01 \%, 34.58 \%$ \& $51.64 \%$ in return on total investment during the study period for NABIL, NIBL \& HBL respectively. This indicates that NIBL is more consistent to earn on its investment than NABIL \& HBL. Likewise, NABIL is more consistent than HBL in this regard.

## 4. Earning Per Share (EPS)

Earning per share refers to the income available to the equity shareholders on per share basis. It enables us to compare whether the earning based on per share basis has changed over the past period or not. It indicates investor's judgement or expectation about firm's performance. The investors favour high EPS. In other words, it reflects the sound profitability position of the bank.

EPS is calculated by using the following formula.

$$
\text { Earning Per Share }(\text { EPS })=\frac{\text { Net Profit After Tax }}{\text { Total no. of Equity Shares }}
$$

Table No. 4.18
Earning Per Share


[^2]Table No. 4.18 shows the EPS of NABIL, NIBL \& HBL along with their average and variation during the study period. The table reveals that the EPS of NABIL have been increase gradually over the years except in FY 2060/61. Where as EPS of NIBL has the fluctuated trend. But in case of HBL, it has decreasing trend of EPS. The average EPS of NABIL, NIBL \& HBL is Rs. 79.45 , Rs. 39.51 and Rs. 60.05 respectively. Higher EPS of NABIL means it has higher profitability on per share basis than NIBL \& HBL. Similarly, EPS of HBL has better position than that of NIBL.

On the basis of coefficient of variation of NABIL(24.35\%),NIBL(16.93\%) \& HBL( $28.88 \%$ ), it can be concluded that NIBL is more consistent on EPS than NABIL \& HBL. Where as NABIL is more consistent than HBL in this regard.

## E. ANALYSIS OF OTHER FINANCIAL INDICATORS.

Apart from above, there are some other financial indicators which throw light on various financial aspects of the bank. Analysis of these indicators will be very useful in order to assess the financial strength and weakness of the bank. In this research work, these indicators are operating expenses to net interest, interest paid to interest earned, total interest earned to total investment, price earning ratio and market value to book value.

## 1. Operating Expenses to Net Interest

The expenses incurred while operating business is called operating expenses. Operating expenses occupies major proportion of total costs of commercial banks. It includes personnel expenses like salary, allowances, contribution to provident fund and provision for bonus. There are other general expenses \& depreciation which are also considered as operating expenses. Net interest is the difference between interest earned and interest paid.

Operating expenses to net interest measures the proportion of net interest spent for operating expenses. High ratio percentage shows that the large amount of income is spent for the operational activity. So, lower ratio percentage is favourable to the bank, as it is the reflection of operational efficiency. It can be calculated as below.

$$
\text { Operating Expenses to Net Interest }=\frac{\text { Total Operating Expenses }}{\text { Net Interest }} \times 100
$$

Operating expenses to net interest of three selected banks is calculated and presented as below.

Table No. 4.19
Operating Expenses to Net Interest


Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.19 shows the percentage of operating expenses to net interest ratio of NABIL, NIBL \& HBL during the study period along with their average and variation. The average operating expenses to net interest ratio of NABIL, NIBL \& HBL is $78.53 \%$, $90.64 \%$ \& $78.03 \%$ respectively. Here, the average operating expenses to net interest of

HBL and NABIL is almost identical where as same average of NIBL is higher than that of other two banks. This indicates HBL \& NABIL's operational efficiency than that of NIBL

On the basis of coefficient of variation of NABIL(24.95\%),NIBL(9.94\%) \& HBL(6.67\%), it can be concluded that HBL is more uniform than NIBL \& NABIL. Where as NIBL is more uniform than NABIL in this regard.

## 2. Interest Paid to Interest Earned

A major source of income of commercial bank is generated from spread in two rates i.e. interest charged and interest paid. Commercial bank receive interest from loans and advances, investment on government securities and treasury bills, cash credit and overdraft, inter bank loan, investment in foreign banks etc. Similarly, it also has to pay interest to its depositors, borrowing \& loan taken by bank. So, commercial bank should mobilize their deposits in such a way that they are able to pay interest to its depositors and able to earn profit. Interest paid to interest earned shows the proportion of interest expenses paid out of interest income generated low percentage is better for the bank from profitability point view. It can be computed by using following formula.

$$
\text { Interest Paid to Interest Earned }=\frac{\text { Total Interest Paid }}{\text { Total Interest Earned }} \times 100
$$

Interest Paid to Interest Earned of three selected banks is calculated and presented as below.

Table No. 4.20
Interest Paid to Interest E arned

| $\begin{array}{c}\text { Fiscal } \\ \text { Year }\end{array}$ | $\begin{array}{c}\text { NAB IL } \\ \text { Interest } \\ \text { Paid }\end{array}$ |  |  | $\begin{array}{c}\text { Interest } \\ \text { Earned }\end{array}$ | $\begin{array}{c}\text { Ratio } \\ \text { (\%) }\end{array}$ | $\begin{array}{c}\text { Interest } \\ \text { Paid }\end{array}$ | $\begin{array}{c}\text { Interest } \\ \text { Earned }\end{array}$ | $\begin{array}{c}\text { Ratio } \\ \text { (\%) }\end{array}$ | $\begin{array}{c}\text { Interest } \\ \text { Paid }\end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 578.36 | 1266.70 | 45.66 | 163.42 | 349.76 | 46.72 | 732.69 | 1326.38 | 55.24 |
| Earned |  |  |  |  |  |  |  |  |  | \(\left.\begin{array}{c}Ratio <br>

(\%)\end{array}\right]\)

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.20 reveals that the percentage of interest paid to interest earned ratio of NABIL, NIBL \& HBL are in fluctuating trend during the study period. The average interest paid to interest earned of NABIL, NIBL \& HBL is $33.82 \%, 42.49 \%$ \& $46 \%$ respectively. It shows that NABIL has lower percentage of average than that of NIBL \& HBL (i.e. $33.82 \%<42.49 \%<46 \%$ ). The average percentage of interest paid to interest earned in case of NIBL is lower than HBL (i.e. $42.49 \%$ < $46 \%$ ). The coefficient of variation of NABIL, NIBL \& HBL is $24.92 \%, 6.37 \%$ \& $13.68 \%$ respectively pn terms ofinterest paid to interest earned ratio. It means NIBL has lower fluctuation percentage of interest paid to interest earned than NABIL \& HBL during the period of study. Similarly, HBL stands second in this regard.

Thus, it can be concluded that HBL pays more interest to its depositors than NABIL \& NIBL. The reason behind HBL pays more interest is that it has more fixed and saving deposit in its deposit structure. On contrary NABIL pays less interest to its depositors than NIBL \& HBL. It is because NABIL has less fixed and saving deposit than NIBL \& HBL in its deposit structure. Due to high proportion of fixed \& saving deposit, HBL is more capable in investing its fund on loans and advances which generates higher interest.

Nevertheless, it is quite clear that NABIL has been able to minimize its interest expenses in relation to interest income than other two banks.

As far as the question of consistency in terms inerest paid to interest earned ratio is concerned NIBL is more consistent in this regard because it has lower percentage of C.V. $6.37 \%$ than $\operatorname{NABIL}(24.92 \%) \& \operatorname{HBL}(13.68 \%)$. On the other hand, HBL is more consistent than NABIL.

## 3. Total Interest Earned to Total Investment

Interest is a major source of earning and it holds large proportion of total operating income of the commercial banks. It is earned on the investment made by the banks. Total interest earned to total investment measures the percentage of interest earned from its total investment. It also tells us how efficiently banks have invested its funds to earn more interest. High ratio percentage is favourable for the bank.

It is calculated by using following formula.

$$
\text { Total Interest Earned to Total Investment }=\frac{\text { Total Interest Earned }}{\text { Total Investment }} \times 100
$$

Total interest earned to total investment of NABIL, NIBL \& HBL is tabulated as below.

Table No. 4.21
Total Interest Earned to Total Investment

| Fiscal Year | NABIL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total Interest Earned | Total Investment | Ratio (\%) | Total Interest Earned | Total Investment | Ratio (\%) | Total Interest E arned | Total Investment | Ratio (\%) |
| 2060/61 | 1266.70 | 7704.31 | 16.44 | 349.76 | 1970.27 | 17.75 | 1326.38 | 4083.16 | 32.48 |
| 2061/62 | 1120.18 | 8199.51 | 13.66 | 326.22 | 1822.16 | 17.90 | 1149.00 | 9157.11 | 12.55 |
| 2062/63 | 1017.87 | 6031.17 | 16.88 | 459.51 | 1705.24 | 26.95 | 1201.23 | 10175.44 | 11.81 |
| 2063/64 | 1001.62 | 5836.07 | 17.16 | 731.40 | 3862.48 | 18.94 | 1245.89 | 9292.11 | 13.41 |
| 2064/65 | 1068.75 | 4267.23 | 25.05 | 886.80 | 3934.19 | 22.54 | 1446.47 | 11692.34 | 12.37 |
|  |  | $\overline{\mathrm{X}}$ | 17.84 |  | $\overline{\mathrm{X}}$ | 20.82 |  | $\overline{\mathrm{X}}$ | 16.52 |
|  |  | $\sigma$ | 3.81 |  | $\sigma$ | 3.52 |  | $\sigma$ | 8.00 |
|  |  | c.v. | 21.38 |  | c.v. | 16.91 |  | c.v. | 48.4 |

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.21 shows the percentage of total interest earned to total investment ratio of NABIL, NIBL \& HBL along with their average and variation. The average total interest earned to total investment of NABIL, NIBL \& HBL is $17.84 \%, 20.82 \%$ \& $16.52 \%$ respectively. That means the average percentage of NIBL is higher than that of NABIL \& HBL by $2.98 \%$ \& $4.3 \%$ respectively. Higher percentage indicates that NIBL has able to earn more interest on its total investment than NABIL \& HBL. It also states that NIBL has utilized its resources properly for investment than the other two banks. Similarly, high percentage of average of NABIL in comparison to HBL indicates that NABIL has able to earn more interest on its total investment than HBL.

On the basis of coefficient of variation, there is a fluctuation of $21.38 \%, 16.91 \%$ \& $48.4 \%$ in total interest earned to total investment ratio during the study period for NABIL, NIBL \& HBL. This indicates that NIBL is more consistent to earn interest on its investment than NABIL \& HBL. Likewise, NABIL is more consistent than HBL in this regard.

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

P/E ratio reflects the investor's perception about the overall risky ness of the bank's earning and the growth of the bank earnings. It indicates the investor's judgement about the bank's performance. It also tells us the price currently bargained by the market participant in common stock for each rupee of earnings. In other words, it measures how market is responding towards the earning performance of the concerned institution.
$\mathrm{P} / \mathrm{E}$ ratio is determined by dividing market value per share (MVPS) with earning per share (EPS). Since, the value of MVPS changes several times in the whole year therefore only closing value of MVPS of each fiscal year is taken for the purpose of this study.

P/E Ratio $=\frac{\text { Market Value Per Share }(\text { Closing })}{\text { Earning Per Share }}$
Price earning ratio (P/E ratio) of NABIL, NIBL \& HBL is calculated and presented as below
Table No. 4.22
Price Earning Ratio

| Fiscal Year | NABIL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MVPS | EPS | Ratio | MVPS | EPS | Ratio | MVPS | EPS | Ratio |
| 2060/61 | 1500.00 | 59.26 | 25.31 | 1150.00 | 33.18 | 34.66 | 1500.00 | 93.57 | 16.03 |
| 2061/62 | 735.00 | 55.25 | 13.30 | 760.00 | 33.59 | 22.63 | 1000.00 | 60.26 | 16.59 |
| 2062/63 | 735.00 | 84.66 | 8.68 | 795.00 | 39.56 | 20.10 | 836.00 | 49.45 | 16.91 |
| 2063/64 | 1000.00 | 92.61 | 10.80 | 940.00 | 51.70 | 18.18 | 840.00 | 49.05 | 17.13 |
| 2064/65 | 1505.00 | 105.49 | 14.27 | 800.00 | 39.50 | 20.25 | 920.00 | 47.91 | 19.20 |
|  |  | $\overline{\mathrm{X}}$ | 14.47 |  | $\overline{\mathrm{X}}$ | 23.16 |  | $\overline{\mathrm{X}}$ | 17.17 |
|  |  | $\sigma$ | 5.76 |  | $\sigma$ | 5.92 |  | $\sigma$ | 1.08 |
|  |  | c.v. | 39.81 |  | c.v. | 25.55 |  | c.v. | 6.29 |

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.22 shows the P/E ratio of NABIL, NIBL \& HBL along with their average and variation. The table shows that NIBL has higher P/E ratio than that of NABIL \& HBL (i.e. $23.16>17.17>14.47$ ), and HBL has higher P/E ratio than that of NABIL (i.e. 17.17 > 14.47). The higher P/E ratio of NIBL than that of NABIL \& HBL reflects its higher market value per share over earning per share. In other words, market has positively judged in the performance of NIBL. HBL stands ahead of NABIL in this regard.

Likewise, coefficient of variation in concerned price earning ratio of NABIL, NIBL \& HBL are $39.81 \%, 25.55 \%$ \& $6.29 \%$ respectively. This indicates that HBL is more consistent than NABIL \& NIBL in P/E ratio. Where as NIBL is more consistent in P/E ratio in comparison to NABIL.

## 5. Market Value to Book Value

Market value to book value reflects the price currently being paid by the market for each rupee of currently reported book value. It measures the value that the financial market attaches to the management and organization of the bank as a growing concern. High ratio is the indication of strong management and organization. As mentioned earlier only closing value of MVPS of each fiscal year is taken for the purpose of this study.

It is calculated as follows.
Market Value to Book Value $=\frac{\text { Market Value Per Share }(\text { Closing })}{\text { Book Value Per Share }}$

Market value to book value of three selected banks is calculated and presented as below.
Table No. 4.23
Market Value to Book Value

| Fiscal Year | NAB IL |  |  | NIB L |  |  | HBL |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MVPS | BVPS | Ratio | MVPS | B VPS | Ratio | MVPS | BVPS | Ratio |
| 2060/61 | 1500.00 | 216.17 | 6.94 | 1150.00 | 275.95 | 4.17 | 1500.00 | 240.19 | 6.25 |
| 2061/62 | 735.00 | 233.18 | 3.15 | 760.00 | 307.95 | 2.47 | 1000.00 | 220.02 | 4.55 |
| 2062/63 | 735.00 | 267.30 | 2.75 | 795.00 | 216.24 | 3.68 | 836.00 | 247.81 | 3.37 |
| 2063/64 | 1000.00 | 301.37 | 3.32 | 940.00 | 246.89 | 3.81 | 840.00 | 246.93 | 3.40 |
| 2064/65 | 1505.00 | 337.15 | 4.46 | 800.00 | 200.80 | 3.98 | 920.00 | 239.59 | 3.84 |
|  |  | $\overline{\mathrm{X}}$ | 4.12 |  | $\overline{\mathrm{X}}$ | 3.62 |  | $\overline{\mathrm{X}}$ | 4.28 |
|  |  | $\sigma$ | 1.52 |  | $\sigma$ | 0.60 |  | $\sigma$ | 1.07 |
|  |  | C.V. | 36.8 |  | c.v. | 16.56 |  | c.v. | 24.98 |

Source: Annual Reports of NABIL,NIBL \& HBL
Table No. 4.23 reveals the market value to book value per share of NABIL, NIBL \& HBL along with their average \& variation. The average market value to book value per share of NABIL, NIBL \& HBL is $4.12,3.62 \& 4.28$ respectively. Higher average of HBL indicates comparatively strong management and organization than NABIL \& NIBL. As far as the question of consistency is concerned, lower C.V. of NIBL( $16.56 \%$ ) indicates better consistent in market value to book value in comparison to NABIL(36.8\%) \& HBL(24.98\%).

## F. INCOME AND EXPENDITURE ANALYSIS

Income and expenditure analysis is a very important tools with the help of which the components of income \& expenditure can be compared between three competitive firms viz. NABIL, NIBL \& HBL. By analyzing income and expenditure structure we can be able to conclude which sources of income and expenditure are dominant in the related concerns.

## 1. Income Analysis.

Income analysis is one of the important indicators of the financial performance. Under income analysis the proportionate contribution of different sources of income in generating total income is analyzed.

The overall income is split up into four major headings under this analysis they are - Interest Income, Commission \& Discount, Foreign Exchange and Fluctuation Gain, and Other Miscellaneous Income. Following tables 4.24, 4.25 \& 4.26 show the contribution of each sources of income to total income of NABIL, NIBL \& HBL.

Table No. 4.24
Income Analysis of NABIL

| Source of Income |  | Fiscal Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | Average |
| Interest Earned | 80.51 | 68.34 | 75.93 | 74.30 | 74.30 | 74.68 |
| Commission \& Discount | 9.33 | 6.98 | 10.77 | 8.96 | 8.96 | 9.00 |
| Foreign Exchange | 10.14 | 9.41 | 10.75 | 12.85 | 12.85 | 11.20 |
| Other Income | 0.02 | 15.27 | 2.55 | 3.89 | 3.89 | 5.12 |
| Total (\%) | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Annual Reports of NABIL

Table No. 4.25 Income Analysis of NIBL
(In Percentage)

| Source of Income |  | Fiscal Year |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | Average |
| Interest Earned | 81.88 | 78.48 | 79.58 | 80.20 | 77.83 | 79.59 |
| Commission \& Discount | 3.79 | 3.90 | 7.07 | 6.11 | 8.21 | 5.82 |
| Foreign Exchange | 11.67 | 10.31 | 8.80 | 9.65 | 9.00 | 9.88 |
| Other Income | 2.66 | 7.31 | 4.55 | 4.04 | 4.96 | 4.71 |
| Total (\%) | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Annual Reports of NIBL

Table No. 4.26
Income Analysis of HBL

| Source of Income | Fiscal Year |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | Average |
| Interest Earned | 84.33 | 82.82 | 83.21 | 82.17 | 82.28 | 82.96 |
| Commission \& Discount | 8.01 | 7.33 | 7.10 | 8.17 | 7.56 | 7.63 |
| Foreign Exchange | 7.26 | 7.54 | 7.59 | 7.41 | 7.81 | 7.52 |
| Other Income | 0.40 | 2.31 | 2.09 | 2.25 | 2.35 | 1.88 |
| Total (\%) | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| Source: Annual Reports of HBL |  |  |  |  |  |  |

Source: Annual Reports of HBL

## - Interest Earned :

As compared to other heads; income generated from interest appears as the major components of earnings, which includes interest received from loan \& advances, cash credit \& overdraft.
The average contribution of interest earned to its total income of NABIL, NIBL \& HBL is $74.68 \%, 79.59 \%$ \& $82.96 \%$ respectively. The analysis shows that almost three fourth of total income of these concerned banks is dominant by interest earned. Higher average of HBL indicates that its contribution of interest earning to total income is higher than NIBL \& NABIL. Where as contribution of interest to total income of NIBL is higher in comparison to NABIL.

## - Commission \& Discount :

Commission and discount includes income received from letter of credit, bank transfer, draft, guarantee commission, selling of shares, discount of bills purchased, remittance charges \& other charges.
From the above tables $4.24,4.25 \& 4.26$, it is clear that the proportionate contribution of commission and discount have fluctuated during the study period for NABIL, NIBL \& HBL. The average contribution of commission \& discount to total income for NABIL, NIBL \& HBL is $9.00 \%, 5.82 \%$ \& $7.63 \%$ respectively. The contribution of commission and discount to total income is higher for NABIL as compared to NIBL \& HBL. This means NABIL is extending more services to its customers than NIBL \& HBL. Higher average of HBL in comparison to NIBL indicates that it stand second in this regard.

## - Foreign Exchange :

Presently the commercial banks are authorized by NRB to deal on foreign exchange these are NABIL, NIBL \& HBL too. Foreign exchange income is made by dealing foreign exchange \& appears are to change in foreign exchange rates. It includes not only gain on sale of foreign currency but also gain in revaluation of our currency.
The above table $4.24,4.25 \& 4.26$ show that the foreign exchange to total income of NABIL, NIBL \& HBL is fluctuating over the years. Average percentage of foreign
exchange income of these banks is $11.20 \%, 9.88 \%$ \& $7.52 \%$ respectively. It is quite obvious that contribution of foreign exchange to total income in case of NABIL is higher than NIBL \& HBL.

- Other Income :

Other income includes various types of income i.e. net income, sale of investment and assets, non banking assets, subsidy from NRB, fixed assets written back and other.
Above tables $4.24,4.25 \& 4.26$ show the contribution of other income to total income of NABIL, NIBL \& HBL. The percentage of contribution of other income to total income is very low in comparison to other sources of income. It has also the fluctuating trend during the study period. The average percentage of other income of these selected banks is $5.12 \%, 4.71 \% \& 1.88 \%$ respectively. It shows the average of NABIL is higher than NIBL \& HBL. In other words, NABIL has the income from the other sources slightly greater in comparison to NIBL \& HBL.

In conclusion, it is seen that earning from interest earned has a higher contribution in total income in case of all three banks. Similarly, incomes from commission \& discount and foreign exchange have also a significant contribution on generating total income for these banks. On the other hand, contribution of other income to total income for these banks is comparatively lower than the other sources of income.

## 2. Expenditure Analysis.

Under expenditure analysis, the proportionate expenditure of different headings of expenses is analyzed. Since, the main objective of the commercial bank is to earn more profit; it has to control its various expenses. In this present study, an attempt is made to compare the commercial banks with respect to their expenditure pattern.

Under this analysis entire operating expenses are split up into major four headings they are - Interest Expenses, Staff Expenses, Provision for Bonus and Other General Expenses. The separate headings of various expenses are presented proportionately in tabular form.

Table No. 4.27 Expenditure Analysis of NABIL
(In Percentage)

| Expenses Heads | Fiscal Year |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | Average |
| Interest Expenses | 53.78 | 38.84 | 40.84 | 39.13 | 35.08 | 41.54 |
| Staff Expenses | 13.56 | 12.18 | 27.10 | 25.01 | 28.74 | 21.32 |
| Provision for Bonus | 4.89 | 3.71 | 8.54 | 9.95 | 12.13 | 7.84 |
| Other General expenses | 27.76 | 45.27 | 23.52 | 25.91 | 24.05 | 29.30 |
| Total (\%) | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Annual Reports of NABIL
Table No. 4.28
Expenditure Analysis of NIBL

| Expenses Heads | Fiscal Year |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 6 0 / 6 1}$ | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | Average |
| Interest Expenses | 50.36 | 39.28 | 47.79 | 49.51 | 45.50 | 46.49 |
| Staff Expenses | 10.48 | 12.56 | 15.48 | 13.62 | 12.45 | 12.92 |
| Provision for Bonus | 3.21 | 2.61 | 4.78 | 3.90 | 4.76 | 3.85 |
| Other General Expenses | 35.95 | 45.54 | 31.95 | 32.96 | 37.29 | 36.74 |
| Total (\%) | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Annual Reports of NIBL

Table No. 4.29
Expenditure Analysis of HBL

| Expenses Heads |  | Fiscal Year |  |  |  | (ln Percentage) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mathbf{2 0 6 1 / 6 2}$ | $\mathbf{2 0 6 2 / 6 3}$ | $\mathbf{2 0 6 3 / 6 4}$ | $\mathbf{2 0 6 4 / 6 5}$ | Average |
| Interest Expenses | 65.56 | 56.85 | 51.74 | 46.18 | 46.80 | 53.43 |
| Staff Expenses | 6.88 | 9.98 | 11.22 | 14.33 | 14.87 | 11.46 |
| Provision for Bonus | 4.33 | 3.81 | 3.73 | 4.39 | 4.84 | 4.22 |
| Other General Expenses | 23.23 | 29.36 | 33.31 | 35.10 | 33.49 | 30.90 |
| Total (\%) | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

Source: Annual Reports of HBL

- Interest Expenses :

Interest expenses are composed with interest paid to depositors, interest paid for bank's borrowing and loans. The above tables $4.27,4.28 \& 4.29$ show that these three bank's (i.e. NABIL, NIBL \& HBL) interest expenses occupies the major proportion of total operating expenses. The average interest payments cover $41.54 \%, 46.49 \%$ \& $53.43 \%$ in NABIL, NIBL \& HBL respectively. While comparing these three banks, HBL holds more percentage in interest than other two banks that means HBL spent more amount on this head. Where as NIBL spent more than NABIL in this regard.

- Staff Expenses :

The expenses related to the personnel of the concerned banks are included in this head of expenses. Such expenses are salaries, allowances, training expenses, contribution to provident fund and other expenses relating to the personnel. The above tables 4.27, $4.28 \& 4.29$ show that the staff expenses hold third position in total expenses for these banks. High average percentage of staff expenses for NABIL (21.32\%) indicates that NABIL spent more expenses on its personnel compared to NIBL \& HBL. Average percentage of NIBL \& HBL is $12.92 \%$ and $11.46 \%$ respectively.

- Provision for Bonus :

The extra amount paid to employees is called bonus. When the firm earns enough profit they distribute some portion of that as a bonus to their employees. It helps to uplift the moral of the employees at the work.
The average provision made for bonus for NABIL, NIBL, \& HBL is $7.84 \%, 3.85 \%$ \& $4.22 \%$ respectively. This indicates that NABIL has incurred higher portion of expenses on its bonus out of total operating expenses than NIBL \& HBL. From the above tables $4.27,4.28 \& 4.29$ it is seen that these banks spent very less amount on this head in comparison to other head of expenses.

## - Other General Expenses :

Other general expenses include rent, water charges, lighting \& heading, normal repair \& maintenance of premises and other assets, insurance, postage, telex \& telephone charges, office equipment and furniture repairs, traveling, printing \& stationery, subscription, advertisement, legal expenses, donations, board expenses, audit fees, depreciation on fixed assets, computer maintenance, entertainments, annual general meeting expenses, technical services reimbursement, loss written off, commission funds transfer, security guard services, premium to credit, guarantee charges on foreign currency notes etc. It is the second major expenses for all three banks.
The above tables $4.27,4.28 \& 4.29$ show that the proportion of general expenses to total expenses has fluctuating trend over the years for NABIL, NIBL \& HBL. Their average general expenses of is $29.30 \%, 36.74 \%$ \& $30.90 \%$ respectively. This shows that NIBL has high general expenses than NABIL \& HBL. It means NIBL is unable to reduce its operating expenses than other two banks.

In conclusion, it is seen that interest expenses occupies the major proportion of total operating expenses in case of all three banks. It occupies almost half of the expenses of total expenses. Similarly, expenses spent on other general expenses have also a significant proportion on total operating expenses for these banks. On the other hand, proportion of provision for bonus to total expenses for these banks is comparatively lower than the other head of expenses.

## G. CORRELATION ANALYSIS.

The degree of relationship between the variables under consideration is measured through the correlation analysis. In other words, correlation analysis is done when it is believe that there is cause and affects relationship between variables. As mentioned earlier the value of correlation ranges between 0 to $\pm 1$. Higher the value of correlation of coefficient i.e. as it approaches to 1 the variables are said to be closely related and if it approaches to 0 the variables are said to be uncorrelated. This relationship may be positive or negative. In case of positive relationship the variables change to the same direction where as in negative correlation the variables under consideration change to opposite direction. Here, in this study, an attempt is made to find the degree of relationship between the following variables.

1. Total Deposit \& Total Investment.
2. Interest Earned \& Interest Paid.
3. Interest Earned \& Operating Profit.

## 1. Correlation Between Total Deposit \& Total Investment.

The major function of the bank is to collect deposits from various sources and to invest those deposits in different productive sector. The investment policy of bank is highly influenced by deposits collected by that bank. That means the bank can invest more if it collects more deposit \& vice versa. Therefore, there should be positive correlation between total deposit \& total investment.

Total deposit of bank includes fixed, saving, current, call \& other deposit where as investment of bank comprises loans and advances, cash credit and overdraft, bills purchase and discount, investment in government securities, investment in local \& foreign banks and money at call and short notice. Investment on share and debenture is not included in this study because it is of fixed nature and banks do not change it when there is change on deposit. Generally, such investments are covered by net worth instead of deposit.

In this study correlation analysis between two variables; total deposit and total investment is calculated to measure the closeness of relationship between them. To what extent dependent variable total investment will change when there is a change in independent variable total deposit.

Table No. 4.30

## Calculation of Correlation Between Total Deposit and Total Investment in Case of NABIL.

Let, $X=$ Total Deposit
and $Y=$ Total Investment
(Rs. In Million)

| Fiscal Year | Total Deposit (X) | Total Investment (Y) | $\begin{gathered} \mathbf{d}_{\mathbf{x}}= \\ (\mathrm{x}-\overline{\mathrm{X}}) \end{gathered}$ | $\begin{gathered} \mathbf{d}_{\mathbf{y}=} \\ (\mathrm{Y}-\overline{\mathrm{Y}}) \end{gathered}$ | $\mathrm{d}_{\mathrm{x}}{ }^{2}$ | $\mathrm{d}_{\mathrm{y}}{ }^{2}$ | $d_{x} d_{y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/61 | 15839.01 | 16532.48 | 1139.3 | 1086.2 | 1297917.90 | 1179920.81 | 1237513.78 |
| 2061/62 | 15506.44 | 15646.56 | 806.7 | 200.3 | 650751.98 | 40129.95 | 161600.25 |
| 2062/63 | 13447.65 | 14435.10 | -1252.1 | -1011.1 | 1567749.40 | 1022394.80 | 1266040.61 |
| 2063/64 | 14119.03 | 14922.57 | -580.7 | -523.7 | 337233.40 | 274225.45 | 304101.92 |
| 2064/65 | 14586.61 | 15694.47 | -113.1 | 248.2 | 12800.21 | 61620.42 | -28084.77 |
| Total | 73498.74 | 77231.18 |  |  | 3866452.89 | 2578291.42 | 2941171.80 |

Here,
$\Sigma \mathrm{X}=73498.74 \quad \Sigma \mathrm{Y}=77231.18$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.

Mean $(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{73498.74}{5}=14699.75$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{77231.18}{5}=15446.24$

Again,

$$
\Sigma \mathrm{d}_{\mathrm{X}}^{2}=3866452.89 \quad \Sigma \mathrm{~d}_{\mathrm{y}}^{2}=2578291.42 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{~d}_{\mathrm{y}}=2941171.80
$$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{2941171.80}{\sqrt{3866452.89} \times \sqrt{2578291.42}}$
$=\frac{2941171.80}{1966.33 \times 1605.71}$
$=\frac{2941171.80}{3157347.36}$
$=0.932$

Coefficient of Determination $\left(r^{2}\right)=(0.932)^{2}=0.868$

Table No. 4.31

## Calculation of Correlation Between Total Deposit and Total Investment in Case of NIBL.

Let, $X=$ Total Deposit
and $\mathrm{Y}=$ Total Investment
(Rs. In Million)

| Fiscal <br> Year | Total <br> Deposit <br> $(\mathbf{X})$ | Total <br> Investment <br> $(\mathbf{Y})$ | $\mathbf{d}_{\mathbf{x}=}(\mathrm{X}-\overline{\mathrm{X}})$ | $\mathbf{d}_{\mathbf{y}=}^{(\mathrm{Y}-\overline{\mathrm{Y}})}$ | $\mathbf{d}_{\mathbf{x}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{y}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{x}} \mathbf{d}_{\mathbf{y}}$ |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: | ---: |
| $2060 / 61$ | 4256.21 | 4386.61 | -4170.4 | -3960.2 | 17392086.03 | 15683136.52 | 16515521.77 |
| $2061 / 62$ | 4174.76 | 4372.70 | -4251.8 | -3974.1 | 18078075.36 | 15793502.60 | 16897222.56 |
| $2062 / 63$ | 7922.75 | 7503.49 | -503.8 | -843.3 | 253856.76 | 711178.50 | 424897.01 |
| $2063 / 64$ | 11524.67 | 11288.72 | 3098.1 | 2941.9 | 9598087.29 | 8654869.75 | 9114285.24 |
| $2064 / 65$ | 14254.57 | 14182.50 | 5828.0 | 5835.7 | 33965327.57 | 34055347.80 | 34010307.90 |
| Total | 42132.96 | 41734.02 |  |  | 79287433.01 | 74898035.18 | 76962234.49 |

Here,
$\Sigma \mathrm{X}=42132.96 \quad \Sigma \mathrm{Y}=41734.02$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{42132.96}{5}=8426.59$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{41734.02}{5}=8346.80$

Again,
$\Sigma \mathrm{d}_{\mathrm{X}}{ }^{2}=79287433.01 \quad \Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}=74898035.18 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}=76962234.49$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{76962234.49}{\sqrt{79287433.01} \times \sqrt{74898035.18}}$
$=\frac{76962234.49}{8904.35 \times 8654.36}$
$=\frac{76962234.49}{77061488.09}$
$=0.999$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.999)^{2}=0.997$

Table No. 4.32

## Calculation of Correlation Between Total Deposit and Total Investment in Case of HBL.

Let, $X=$ Total Deposit
and $\mathrm{Y}=$ Total Investment
(Rs. In Million)

| Fiscal Year | Total Deposit (X) | Total Investment (Y) | $\begin{gathered} \mathbf{d}_{\mathbf{x}}= \\ (\mathrm{x}-\overline{\mathrm{X}}) \end{gathered}$ | $\begin{gathered} \mathbf{d}_{\mathbf{y}=} \\ (\mathrm{Y}-\overline{\mathrm{Y}}) \end{gathered}$ | $\mathrm{d}_{\mathrm{x}}{ }^{2}$ | $\mathrm{d}_{\mathrm{y}}{ }^{2}$ | $d_{x} d_{y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/61 | 17532.40 | 17145.47 | -3264.3 | -3239.4 | 10655628.38 | 10493453.21 | 10574229.89 |
| 2061/62 | 18619.37 | 18388.92 | -2177.3 | -1995.9 | 4740748.51 | 3983656.73 | 4345746.74 |
| 2062/63 | 21007.37 | 20293.12 | 210.7 | -91.7 | 44383.53 | 8410.72 | -19320.91 |
| 2063/64 | 22010.34 | 21578.61 | 1213.6 | 1193.8 | 1472931.76 | 1425110.69 | 1448823.93 |
| 2064/65 | 24814.00 | 24518.03 | 4017.3 | 4133.2 | 16138731.43 | 17083342.24 | 16604320.89 |
| Total | 103983.48 | 101924.15 |  |  | 33052423.61 | 32993973.59 | 32953800.54 |

Here,
$\Sigma \mathrm{X}=103983.48 \quad \Sigma \mathrm{Y}=101924.15$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{103983.48}{5}=20796.70$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{101924.15}{5}=20384.83$

Again,

$$
\Sigma \mathrm{d}_{\mathrm{X}}^{2}=33052423.61 \quad \Sigma \mathrm{~d}_{\mathrm{y}}^{2}=32993973.59 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{~d}_{\mathrm{y}}=32953800.54
$$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{32953800.54}{\sqrt{33052423.61} \times \sqrt{32993973.59}}$
$=\frac{32953800.54}{5749.12 \times 5744.04}$
$=\frac{32953800.54}{33023185.67}$
$=0.998$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.998)^{2}=0.996$

From the above computation, it is clear that correlation coefficient between total deposit \& total investment of NABIL, NIBL \& HBL is $0.932,0.999 \& 0.998$ respectively.

So, there is positive and very high degree of correlation between total deposit \& total investment of three banks. In order to measure the degree of change on dependent variable (investment) due to change on independent variable (deposit) value of coefficient of determination is calculated.

On the basis of coefficient of determination, it is known that when there is a change in total deposit, it brings $86.8 \%$ change in total investment of NABIL, $99.7 \%$ change in total investment of NIBL and $99.6 \%$ change in total investment of HBL. Hence, it can be concluded that total deposit and total investment are perfectly correlated but degree of closeness between these two variables of NIBL is higher than that of NABIL \& HBL.

## 2. Correlation Between Interest Earned \& Interest Paid.

A commercial bank earns interest from different types of investment i.e. loan \& advances, cash credit \& overdraft, investment in government securities, inter bank loan, investment in foreign banks, money at call \& short notice etc. Similarly, a commercial bank also has to pay interest to its depositors, borrowing and loans. If bank has more deposit (fixed \& saving), bank has to pay more interest to their depositors but bank can earn more interest by investing their deposits in profitable sectors. Thus interest earned and interest paid are related variables.

In this study, correlation analysis between two variables interest earned and interest paid is calculated to measure the closeness of relationship between them. Interest earned \& interest paid are regarded as independent and dependent variable respectively.

Table No. 4.33
Calculation of Correlation Between Interest Earned and Interest Paid In Case of NABIL.

Let, $X=$ Interest Earned
and $Y=$ Interest Paid

| Fiscal <br> Year | Interest <br> Earned <br> $(\mathbf{X})$ | Interest <br> Paid <br> $(\mathbf{Y})$ | $\mathbf{d}_{\mathbf{x}=}$ <br> $(\mathrm{X}-\overline{\mathrm{X}})$ | $\mathbf{d}_{\mathbf{y}=}(\mathrm{Y}-\overline{\mathrm{Y}})$ | $\mathbf{d}_{\mathbf{x}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{y}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{x}} \mathbf{d}_{\mathbf{y}}$ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2060 / 61$ | 1266.70 | 578.36 | 171.7 | 201.5 | 29472.65 | 40604.67 | 34593.74 |
| $2061 / 62$ | 1120.18 | 462.08 | 25.2 | 85.2 | 632.82 | 7263.47 | 2143.95 |
| $2062 / 63$ | 1017.87 | 317.35 | -77.2 | -59.5 | 5952.74 | 3540.73 | 4590.97 |
| $2063 / 64$ | 1001.62 | 282.94 | -93.4 | -93.9 | 8724.31 | 8819.84 | 8771.94 |
| $2064 / 65$ | 1068.75 | 243.54 | -26.3 | -133.3 | 690.32 | 17772.62 | 3502.69 |
| Total | 5475.12 | 1884.27 |  |  | 45472.84 | 78001.33 | 53603.30 |

Here,
$\Sigma \mathrm{X}=5475.12 \quad \Sigma \mathrm{Y}=1884.27$
$\mathrm{N}=5$
Where, $\mathrm{N}=\mathrm{No}$. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{5475.12}{5}=1095.02$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{1884.27}{5}=376.85$

Again,
$\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}=45472.84 \quad \Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}=78001.33 \quad \Sigma \mathrm{~d}_{\mathrm{x}} \mathrm{d}_{\mathrm{y}}=53603.30$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{53603.30}{\sqrt{45472.84} \times \sqrt{78001.33}}$
$=\frac{53603.30}{213.24 \times 279.29}$
$=\frac{53603.30}{59556.21}$
$=0.900$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.900)^{2}=0.810$

Table No. 4.34
Calculation of Correlation Between Interest Earned and Interest Paid In Case of NIBL.
Let, $X=$ Interest Earned
and $Y=$ Interest Paid
(Rs. In Million)

| Fiscal <br> Year | Interest <br> Earned <br> $\mathbf{( X )}$ | Interest <br> Paid <br> $\mathbf{( Y )}$ | $\mathbf{d}_{\mathbf{x}=}$ <br> $(\mathrm{X}-\overline{\mathrm{X}})$ | $\mathbf{d}_{\mathbf{y}=}$ <br> $(\mathrm{Y}-\overline{\mathrm{Y}})$ | $\mathbf{d}_{\mathbf{x}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{y}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{x}} \mathbf{d}_{\mathbf{y}}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2060 / 61$ | 349.76 | 163.42 | -201.0 | -69.3 | 40392.16 | 4808.87 | 13937.02 |
| $2061 / 62$ | 326.22 | 130.44 | -224.5 | -102.3 | 50408.33 | 10470.61 | 22974.03 |
| $2062 / 63$ | 459.51 | 189.21 | -91.2 | -43.6 | 8322.55 | 1897.13 | 3973.53 |
| $2063 / 64$ | 731.40 | 326.21 | 180.7 | 93.4 | 32638.76 | 8731.78 | 16881.78 |
| $2064 / 65$ | 886.80 | 354.55 | 336.1 | 121.8 | 112937.67 | 14831.34 | 40926.97 |
| Total | 2753.69 | 1163.83 |  |  | 244699.46 | 40739.73 | 98693.33 |

Here,
$\Sigma \mathrm{X}=2753.69 \quad \Sigma \mathrm{Y}=1163.83$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{2573.69}{5}=550.74$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{1163.83}{5}=232.77$

Again,
$\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}=244699.46 \quad \Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}=40739.73 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}=98693.33$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{98693.33}{\sqrt{244699.46} \times \sqrt{40739.73}}$
$=\frac{98693.33}{494.67 \times 201.84}$
$=\frac{98693.33}{99844.83}$
$=0.988$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.988)^{2}=0.977$

Table No. 4.35

## Calculation of Correlation Between Interest Earned and Interest Paid In Case of HBL.

Let, $X=$ Interest Earned
and $Y=$ Interest Paid
(Rs. In Million)

| Fiscal <br> Year | Interest <br> Earned <br> $\mathbf{( X )}$ | Interest <br> Paid <br> (Y) | $\mathbf{d}_{\mathbf{x}=}$ <br> $(\mathrm{X}-\overline{\mathrm{X}})$ | $\mathbf{d}_{\mathbf{y}=}$ <br> $(\mathrm{Y}-\overline{\mathrm{Y}})$ | $\mathbf{d}_{\mathbf{x}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{y}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{x}} \mathbf{d}_{\mathbf{y}}$ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2060 / 61$ | 1326.38 | 732.69 | 52.6 | 149.0 | 2765.29 | 22201.00 | 7835.31 |
| $2061 / 62$ | 1149.00 | 578.13 | -124.8 | -5.6 | 15573.54 | 30.91 | 693.85 |
| $2062 / 63$ | 1201.23 | 554.13 | -72.6 | -29.6 | 5265.53 | 873.79 | 2144.99 |
| $2063 / 64$ | 1245.89 | 491.54 | -27.9 | -92.2 | 778.63 | 8491.62 | 2571.35 |
| $2064 / 65$ | 1446.47 | 561.96 | 172.7 | -21.7 | 29817.00 | 472.19 | -3752.25 |
| Total | 6368.97 | 2918.45 |  |  | 54200.00 | 32069.52 | 9493.26 |

Here,
$\Sigma \mathrm{X}=6368.97 \quad \Sigma \mathrm{Y}=2918.45$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{6368.97}{5}=1273.79$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{2918.45}{5}=583.69$

Again,
$\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}=54200.00 \quad \Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}=32069.52 \quad \Sigma \mathrm{~d}_{\mathrm{x}} \mathrm{d}_{\mathrm{y}}=9493.26$
Now,
Correlation of Coefficient $(\mathrm{r})=\frac{\Sigma \mathrm{d}_{\mathrm{x}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{9493.26}{\sqrt{54200.00} \times \sqrt{32069.52}}$
$=\frac{9493.26}{232.81 \times 179.08}$
$=\frac{9493.26}{41691.34}$
$=0.228$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.228)^{2}=0.052$

The above computation shows the correlation coefficient between interest earned and interest paid of NABIL, NIBL \& HBL. Their coefficient of correlation between interest earned \& interest paid is $0.900,0.988 \& 0.228$ respectively. So, there is positive correlation between these variables. In order to measure the degree of change on dependent variable (Interest Paid) due to change on independent variable (Interest Earned), coefficient of determination is calculated.

On the basis of coefficient of determination, it is known that when there is change in interest earned it brings $81 \%$ change in interest paid of NABIL, $97.7 \%$ change in interest paid of NIBL and $5.2 \%$ change in interest paid of HBL. So, it can be concluded that interest earned and interest paid are perfectly correlated in case of NABIL \& NIBL. But the degree of correlation between interest earned and interest paid of HBL is not so perfectly correlated as compared to NABIL \& NIBL.

## 3. Correlation Between Interest Earned \& Operating Profit.

Operating profit refers to profit before deducting taxes. Interest earned refers to such income which is earned from the investment made by the bank. Earning from interest holds big proportion in total operating income of the bank. Here, operating profit is affected by the interest earned of the bank. In this study, correlation analysis between two variables interest earned and operating profit is calculated to measure the closeness of relationship between them. To what extent dependent variable (Operating Profit) will change when there is a change in independent variable (Interest Earned)

Table No. 4.36

## Calculation of Correlation Between Interest Earned and Operating Profit In C ase of NAB IL.

Let, $X=$ Interest Earned
and $\mathrm{Y}=$ Operating Profit
(Rs. In Million)

| Fiscal <br> Year | Interest <br> Earned <br> $\mathbf{( X )}$ | Operating <br> Profit <br> $\mathbf{Y})$ | $\mathbf{d}_{\mathbf{x}=}$ <br> $(\mathrm{X}-\overline{\mathrm{X}})$ | $\mathbf{d}_{\mathbf{y}=}$ <br> $(\mathrm{Y}-\overline{\mathrm{Y}})$ | $\mathbf{d}_{\mathbf{x}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{y}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{x}} \mathbf{d}_{\mathbf{y}}$ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2060 / 61$ | 1266.70 | 471.72 | 171.7 | -60.2 | 29472.65 | 3625.00 | -10336.27 |
| $2061 / 62$ | 1120.18 | 409.63 | 25.2 | -122.3 | 632.82 | 14956.80 | -3076.53 |
| $2062 / 63$ | 1017.87 | 528.45 | -77.2 | -3.5 | 5952.74 | 12.10 | 268.34 |
| $2063 / 64$ | 1001.62 | 564.30 | -93.4 | 32.4 | 8724.31 | 1047.95 | -3023.67 |
| $2064 / 65$ | 1068.75 | 685.54 | -26.3 | 153.6 | 690.32 | 23596.65 | -4036.00 |
| Total | 5475.12 | 2659.64 |  |  | 45472.84 | 43238.49 | -20204.13 |

Here,
$\Sigma \mathrm{X}=5475.12 \quad \Sigma \mathrm{Y}=2659.64$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.

Mean $(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{5475.12}{5}=1095.02$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{2659.64}{5}=531.93$

Again,
$\Sigma \mathrm{d}_{\mathrm{X}}{ }^{2}=45472.84 \quad \Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}=43238.49 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}=-20204.13$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{-20204.13}{\sqrt{45472.84} \times \sqrt{43238.49}}$
$=\frac{-20204.13}{213.24 \times 207.94}$
$=\frac{-20204.13}{44341.60}$
$=-0.456$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(-0.456)^{2}=0.208$

Table No. 4.37

## Calculation of Correlation Between Interest Earned and Operating Profit In Case of NIBL.

Let, $\mathrm{X}=$ Interest Earned
and $\mathrm{Y}=$ Operating Profit
(Rs. In Million)

| Fiscal Year | Interest Earned (X) | Operating Profit (Y) | $\begin{gathered} \mathbf{d}_{\mathbf{x}}= \\ (\mathrm{x}-\overline{\mathrm{X}}) \end{gathered}$ | $\begin{gathered} \mathbf{d}_{\mathbf{y}=} \\ (\mathrm{Y}-\overline{\mathrm{Y}}) \end{gathered}$ | $\mathrm{d}_{\mathrm{x}}{ }^{2}$ | $\mathrm{d}_{\mathrm{y}}{ }^{2}$ | $d_{x} d_{y}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2060/61 | 349.76 | 93.87 | -201.0 | -85.3 | 40392.16 | 7272.00 | 17138.60 |
| 2061/62 | 326.22 | 75.01 | -224.5 | -104.1 | 50408.33 | 10844.31 | 23380.41 |
| 2062/63 | 459.51 | 169.66 | -91.2 | -9.5 | 8322.55 | 89.98 | 865.39 |
| 2063/64 | 731.40 | 229.70 | 180.7 | 50.6 | 32638.76 | 2555.71 | 9133.19 |
| 2064/65 | 886.80 | 327.49 | 336.1 | 148.3 | 112937.67 | 22005.94 | 49852.78 |
| Total | 2753.69 | 895.73 |  |  | 244699.46 | 42767.94 | 100370.36 |

Here,
$\Sigma \mathrm{X}=2753.69 \quad \Sigma \mathrm{Y}=895.73$
$\mathrm{N}=5$
Where, $\mathrm{N}=$ No. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{2753.69}{5}=550.74$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\sum \mathrm{Y}}{N}=\frac{895.73}{5}=179.15$

Again,

$$
\Sigma \mathrm{d}_{\mathrm{x}}^{2}=244699.46 \quad \Sigma \mathrm{~d}_{\mathrm{y}}^{2}=42767.94 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{~d}_{\mathrm{y}}=100370.36
$$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{100370.36}{\sqrt{244699.46} \times \sqrt{42767.94}}$
$=\frac{100370.36}{494.67 \times 206.80}$
$=\frac{100370.36}{102300.00}$
$=0.981$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.981)^{2}=0.963$

Table No. 4.38
Calculation of Correlation Between Interest Earned and Operating Profit In Case of HBL.

Let, $\mathrm{X}=$ Interest Earned
and $\mathrm{Y}=$ Operating Profit
(Rs. In Million)

| Fiscal <br> Year | Interest <br> Earned <br> $\mathbf{( X )}$ | Operating <br> Profit <br> $\mathbf{Y})$ | $\mathbf{d}_{\mathbf{x}=}$ <br> $(\mathrm{X}-\overline{\mathrm{X}})$ | $\mathbf{d}_{\mathbf{y}=}$ <br> $(\mathrm{Y}-\overline{\mathrm{Y}})$ | $\mathbf{d}_{\mathbf{x}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{y}}{ }^{\mathbf{2}}$ | $\mathbf{d}_{\mathbf{x}} \mathbf{d}_{\mathbf{y}}$ |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $2060 / 61$ | 1326.38 | 432.69 | 52.6 | 19.6 | 2765.29 | 383.30 | 1029.53 |
| $2061 / 62$ | 1149.00 | 346.59 | -124.8 | -66.5 | 15573.54 | 4425.18 | 8301.55 |
| $2062 / 63$ | 1201.23 | 349.26 | -72.6 | -63.9 | 5265.53 | 4077.08 | 4633.36 |
| $2063 / 64$ | 1245.89 | 417.27 | -27.9 | 4.2 | 778.63 | 17.29 | -116.02 |
| $2064 / 65$ | 1446.47 | 519.75 | 172.7 | 106.6 | 29817.00 | 11371.66 | 18413.82 |
| Total | 6368.97 | 2065.56 |  |  | 54200.00 | 20274.50 | 32262.23 |

Here,

$$
\begin{aligned}
& \Sigma X=6368.97 \quad \Sigma Y=2065.56 \\
& N=5
\end{aligned}
$$

Where, $\mathrm{N}=$ No. of observations.
$\operatorname{Mean}(\overline{\mathrm{X}})=\frac{\Sigma \mathrm{X}}{N}=\frac{6368.97}{5}=1273.79$
$\operatorname{Mean}(\overline{\mathrm{Y}})=\frac{\Sigma \mathrm{Y}}{N}=\frac{2065.56}{5}=413.11$

Again,

$$
\Sigma \mathrm{d}_{\mathrm{X}}^{2}=54200.00 \quad \Sigma \mathrm{~d}_{\mathrm{y}}^{2}=20274.50 \quad \Sigma \mathrm{~d}_{\mathrm{X}} \mathrm{~d}_{\mathrm{y}}=32262.23
$$

Now,
Correlation of Coefficient (r) $=\frac{\Sigma \mathrm{d}_{\mathrm{X}} \mathrm{d}_{\mathrm{y}}}{\sqrt{\Sigma \mathrm{d}_{\mathrm{x}}{ }^{2}} \cdot \sqrt{\Sigma \mathrm{~d}_{\mathrm{y}}{ }^{2}}}$
$=\frac{32262.23}{\sqrt{54200.00} \times \sqrt{20274.50}}$
$=\frac{32262.23}{232.81 \times 142.39}$
$=\frac{32262.23}{33149.33}$
$=0.973$

Coefficient of Determination $\left(\mathrm{r}^{2}\right)=(0.973)^{2}=0.947$

The above computation shows the correlation coefficient between interest earned and operating profit of NABIL, NIBL \& HBL. Their coefficient of correlation between interest earned and operating profit is $-0.456,0.981 \& 0.947$ respectively. It indicates that there is a positive and very high degree of correlation between interest earned and operating profit for NIBL \& HBL. But in case of NABIL there is negative correlation between interest earned \& operating profit. Generally, interest earned and operating profit are positively correlated but here in case of NABIL it is negatively correlated. The reason of negative correlation in case of NABIL is because interest earned of NABIL is in decreasing trend where as the operating profit is in increasing trend.

Similarly, in order to measure the degree on dependent variable (operating profit) due to change in independent variable (interest earned), coefficient of determination is calculated. On the basis of coefficient of determination, it is known that when there is a change in interest earned it brings $96.3 \%$ and $94.7 \%$ change in operating profit of NIBL \& HBL respectively. On the other hand interest earned and operating profit are not relatively correlated in case of NABIL because when there is a change in interest earned it brings $20.8 \%$ opposite change in operating profit; which generally does not happen.

## H. TREND ANALYSIS.

Trend analysis is a mathematical method, which is widely used to find out direction of change based on the past assumptions. In financial analysis, direction of change over a period of years is of crucial importance. Trend analysis shows the percentage change in several successive years instead of between two years. Moreover, it examines whether the financial position of a firm is improving or deteriorating over the years.

For trend analysis, the use of index number is generally advocated. The procedure followed is to assign a base year (In this study first fiscal year of each selected banks is assumed as a base year) equal to 100 (percentage) and to calculate percentage changes in each item of other subsequent years in relation to the base year.

It is computed by using following formula.
Trend Percentage $=\frac{\text { Yearly Amount }}{\text { Base Year's Amount }} \times 100$
In this section, researcher is going to analyze some of the significant items contained in the financial statement by the mean of trend with the purpose to find out the actual position of NABIL, NIBL \& HBL. They are

- Trend of Deposit
- Trend of Net worth
- Trend of Investment
- Trend of Operating Income
- Trend of Total Expenses
- Trend of Net Profit
- Trend of Interest Earning

Trend of these activities are also presented graphically.

## 1. Trend of Deposit.

It is necessary to know the growth of collecting deposit of concerned banks over the years to assess their financial growth because the growth of banks primarily depends upon the growth of its deposit. This is because deposit collected from depositors constitute as a main source of funds that management uses to generate returns through investment.

High speed of collecting deposit shows better efficiency of banks in their operations. In this part of study, total deposit trend, fixed deposit trend and saving deposit trend of concerned banks is calculated to compare the improvement or deterioration in the collection of deposit during the study period.

## i. Trend of Total Deposit:

Total deposit trend of NABIL, NIBL \& HBL has been presented as under.
Table No. 4.39 Trend of Total Deposit

| Fiscal Year | NABIL |  | NIBL |  | HBL |  |
| :---: | ---: | :---: | ---: | :---: | :---: | :---: |
|  | Total <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Total <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Total <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |
|  | 15839.01 | 100.00 | 4256.21 | 100.00 | 17532.40 | 100.00 |
| $2061 / 62$ | 15506.44 | 97.90 | 4174.76 | 98.09 | 18619.37 | 106.20 |
| $2062 / 63$ | 13447.65 | 84.90 | 7922.75 | 186.15 | 21007.37 | 119.82 |
| $2063 / 64$ | 14119.03 | 89.14 | 11524.67 | 270.77 | 22010.34 | 125.54 |
| $2064 / 65$ | 14586.61 | 92.09 | 14254.57 | 334.91 | 24814.00 | 141.53 |

As the table no. 4.39 depicts total deposit trend of NIBL \& HBL is in increasing trend where as the trend of total deposit of NABIL is in decreasing trend. In case of NIBL trend of total deposit has increased more than 3.3 times in comparison to the base year. Total deposit trend of HBL is also increasing continuously but the speed of trend is not as rapid as comparison to NIBL. HBL has average increasing trend of total deposit. On the other hand, NABIL's trend of total deposit is in decreasing trend. It has gone down to lowest of $84.90 \%$ and never cross the trend line of base year during the whole period of study.

Trend of Total Deposit shown in table no. 4.39 is also presented in graphical form as mentioned below.

Graph No. 1


Graph No. 1 shows that, there is an increasing trend of total deposit of NIBL \& HBL, where as total deposit trend of NABIL is in decreasing trend. The up going trend line of NIBL indicates that it has higher growth rate of collection of deposit than the other two banks. Similarly, the slightly up going trend line of HBL also indicates that it is successful in colleting deposit. On the contrary, the trend line of NABIL shows that it is inefficient in deposit collection.

## ii. Trend of Fixed Deposit:

To find out the direction of change of fixed deposit, trend of fixed deposit for three banks viz. NABIL, NIBL \& HBL is calculated as below.

Table No. 4.40
Trend of Fixed Deposit

| Fiscal Year | NAB IL |  | NIBL |  | HBL |  |
| :---: | ---: | :---: | ---: | ---: | ---: | :---: |
|  | Fixed <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Fixed <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Fixed <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |
| $2060 / 61$ | 3719.20 | 100.00 | 1658.66 | 100.00 | 4927.37 | 100.00 |
| $2061 / 62$ | 2446.85 | 65.79 | 945.93 | 57.03 | 5480.84 | 111.23 |
| $2062 / 63$ | 2252.54 | 60.57 | 1672.82 | 100.85 | 3205.37 | 65.05 |
| $2063 / 64$ | 2310.57 | 62.13 | 2294.68 | 138.35 | 4710.18 | 95.59 |
| $2064 / 65$ | 2078.54 | 55.89 | 3212.26 | 193.67 | 6107.43 | 123.95 |

Table no. 4.40 shows the fixed deposit trend of NABIL, NIBL \& HBL during the study period. As the table depicts, the fixed deposit trend of NIBL is in increasing trend, it is fluctuating in HBL where as it is decreasing in case of NABIL. The trend in FY 2064/65 has increased to $193.67 \%$ in NIBL which is almost twice than that of base year. In HBL the trend has gone down to lowest of $65.05 \%$ in FY 2062/63 but it has increased to 123.95\% in year 064/65. On the other hand, the trend of NABIL shows its inefficiency in collection of fixed deposit. In case of NABIL, the trend has decreased to $55.89 \%$ in FY 2064/65 which is almost half than that of base year.

The same situation is presented by graph as below.

## Graph No. 2



Graph No. 2 shows the ups and downs of fixed deposit trend of NABIL, NIBL \& HBL. While comparing fixed deposit trend of these three banks, NIBL stood at first as the gap of trend line of fixed deposit of NIBL is widening than other two banks. HBL \& NABIL stood second and last respectively in this regard. This means in collection of fixed deposit there is higher growth in NIBL in comparison to other two banks.

## iii. Trend of Saving Deposit:

In order to find out the direction of change of saving deposit, saving deposit trend of NABIL, NIBL \& HBL is calculated.

Table No. 4.41
Trend of Saving Deposit

| Fiscal Year | NAB IL |  | NIBL |  | HB |  |
| :---: | ---: | :---: | ---: | ---: | ---: | ---: |
|  | Saving <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Saving <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Saving <br> Deposit <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |
| $2060 / 61$ | 4917.14 | 100.00 | 1259.57 | 100.00 | 9144.47 | 100.00 |
| $2061 / 62$ | 4972.06 | 101.12 | 1278.79 | 101.53 | 9163.95 | 100.21 |
| $2062 / 63$ | 5229.72 | 106.36 | 2434.05 | 193.24 | 10870.54 | 118.88 |
| $2063 / 64$ | 5994.12 | 121.90 | 4886.10 | 387.92 | 11759.60 | 128.60 |
| $2064 / 65$ | 7026.33 | 142.89 | 6703.51 | 532.21 | 12852.41 | 140.55 |

Table No. 4.41 shows the saving deposit trend of these banks during the study period. Saving deposit trend of concerned banks are in increasing trend but this trend is higher in NIBL in comparison to NABIL \& HBL. Increasing trend of saving deposit is more or less similar in case of NABIL \& HBL. The saving deposit trend in FY 064/656 has increased to $142.89 \%$ in NABIL, $532.21 \%$ in NIBL \& $140.55 \%$ in HBL. So, increasing trend of saving deposit of NIBL is more than 3.5 times higher than that of NABIL \& HBL.

Graph No. 3 shows the trend line of NABIL, NIBL \& HBL.

Graph No. 3


From the above graph, it is clearly seen that the trend of saving deposit is always higher in NIBL than the other two banks. The higher trend line of saving deposit in case of indicates that there is higher growth in collection of saving deposit in comparison to NABIL \& HBL.

## 2. Trend of Net worth.

The net worth or shareholder's fund plays vital role in supporting its daily operation and ensuring the long run viability of banking system. Net worth defends bank against risk and it also assists in maintaining public confidence in the bank's management. Net worth denotes the insider fund, which includes paid up capital, reserves \& surplus and undistributed profit. Here, trend of net worth is calculated to compare the improvement or deterioration in net worth of NABIL, NIBL \& HBL during the study period.

Table No. 4.42
Trend of Net worth

| Fiscal Year | NABIL |  | NIBL |  | HBL |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Net worth <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Net worth <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Net worth <br> (Rs. In Mill.) | Trend Line <br> (In \%) |
| $2060 / 61$ | 1062.83 | 100.00 | 469.08 | 100.00 | 720.60 | 100.00 |
| $2061 / 62$ | 1146.42 | 107.86 | 523.46 | 111.59 | 858.13 | 119.09 |
| $2062 / 63$ | 1314.18 | 123.65 | 638.53 | 136.12 | 1063.14 | 147.54 |
| $2063 / 64$ | 1481.68 | 139.41 | 729.04 | 155.42 | 1324.17 | 183.76 |
| $2064 / 65$ | 1657.63 | 155.96 | 1180.17 | 251.59 | 1541.75 | 213.95 |

Table No. 4.42 shows the net worth trend of three banks through out the study period. It shows that the net worth trend of all the banks is increasing continuously. In FY 2064/65 it has increased up to $155.96 \%$, $251.59 \%$ \& $213.95 \%$ in NABIL, NIBL \& HBL respectively. While comparing among three banks, the growth of net worth is better of NIBL than that of NABIL \& HBL. HBL stands second in this regard.

Graphically, trend line of net worth of NABIL, NIBL \& HBL is presented as below.

## Graph No. 4



From the above Graph No. 4 it is clear that the trend line of net worth is increasing continuously of these three banks. Higher trend line of NIBL indicates that NIBL's growth of net worth is better than that of NABIL \& HBL. While comparing between NABIL \& HBL, higher trend line of HBL shows it is better than NABIL in this regard.

## 3. Trend of Investment.

At which speed these selected banks have invested their funds obtains a great importance in analyzing their financial growth. Hence, in this section of study, total investment trend, loan \& advances trend and bills purchase and discount trend are computed to compare the improvement or deterioration in the investment of NABIL, NIBL \& HBL.

## i. Trend of Total Investment:

Total investment includes investment in loan \& advances, cash credit \& overdraft, bills purchase and discount, money at call \& short notice etc. Here, the total investment trend is calculated in order to find out the direction of change of total investment.

Table No. 4.43
Trend of Total Investment

| Fiscal Year | NAB IL |  | NIB L |  | HB L |  |
| :---: | ---: | :---: | ---: | ---: | ---: | :---: |
|  | Total <br> Investment <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Total <br> Investment <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Total <br> Investment <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |
|  | 16532.48 | 100.00 | 4386.61 | 100.00 | 17145.47 | 100.00 |
| $2061 / 62$ | 15646.56 | 94.64 | 4372.70 | 99.68 | 18388.92 | 107.25 |
| $2062 / 63$ | 14435.10 | 87.31 | 7503.49 | 171.05 | 20293.12 | 118.36 |
| $2063 / 64$ | 14922.57 | 90.26 | 11288.72 | 257.34 | 21578.61 | 125.86 |
| $2064 / 65$ | 15694.47 | 94.93 | 14182.50 | 323.31 | 24518.03 | 143.00 |

Table No. 4.43 shows the total investment trend of three banks during the study period. As the table depicts, this trend is increasing in case of NIBL \& HBL where as the same trend of NABIL is in decreasing trend. Total investment trend of NABIL, NIBL \& HBL in FY 2064/65 is $94.93 \%, 323.31 \%$ \& $143.0 \%$ respectively. While analyzing total deposit trend and total investment trend of these three banks, it is found that the growth trend of total deposit and total investment of concerned banks are almost identical. This indicates that, these banks have made their investment at the same rate in which they have collected their deposits.

Graphically total investment trend is presented below.

## Graph No. 5



In Graph No. 5, it is clearly seen that trend line of total investment is increasing rapidly in case of NIBL than NABIL \& HBL. Since, investment of available resources is one of the major functions of commercial bank to earn maximum income. Higher trend line of investment of NIBL indicates that it is improvising its investment more efficiently than other two banks.

## ii. Trend of Loan \& Advances:

Loan \& advances are regarded as a long term investment and out of other heads of investment it generally yields high rate of returns. In this study, trend of loan \& advances is calculated to compare the improvement of deterioration in loan \& advances of NABIL, NIBL \& HBL during the study period. Trend of loan $\&$ advances of these banks has been presented below.

Table No. 4.44
Trend of Loans and advances

| Fiscal Year | NABIL |  | NIB L |  | HB L |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  <br> Advances <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |  <br> Advances <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |  <br> Advances <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |
|  | 7993.28 | 100.00 | 2318.91 | 100.00 | 8651.74 | 100.00 |
| $2061 / 62$ | 7135.54 | 89.27 | 2518.06 | 108.59 | 8653.57 | 100.02 |
| $2062 / 63$ | 7454.26 | 93.26 | 5648.03 | 243.56 | 9700.66 | 112.12 |
| $2063 / 64$ | 7953.76 | 99.51 | 6917.80 | 298.32 | 11635.31 | 134.49 |
| $2064 / 65$ | 10465.27 | 130.93 | 9933.08 | 428.35 | 12088.71 | 139.73 |

Table No. 4.44 shows that the trend of loan \& advances are in increasing trend in case of NIBL \& HBL, it has increased to $428.35 \%$ \& $139.73 \%$ during the study period respectively. But the same trend of NABIL has been fluctuating over the years. It has dropped down to $89.27 \%$ in FY 061/62 and increased to $130.93 \%$ in FY 064/65. This clearly indicates that NIBL is providing its great portion as loans and advances.

The same situation is presented graphically as below.

## Graph No. 6



Graph No. 6 shows the trend line of loan \& advances of concerned banks. It is clearly seen that there is small gap between trend lines of HBL \& NABIL. But the same gap has been extremely wider in case of NIBL. It means investment in loan \& advances of NIBL is improving very significantly in comparison to NABIL \& HBL.

## iii. Trend of Bills Purchase \& Discount.

In order to find out the direction of change of bills purchase and discount; trend of bills purchase \& discount of NABIL, NIBL \& HBL is calculated. Trend of bills purchase \& discount of these banks is presented as below.

Table No. 4.45
Trend of Bills Purchase \& Discount

| Fiscal Year | NAB IL |  | NIB L |  | HBL |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Bills Purc. <br> \& Disc. <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Bills Purc. <br> \& Disc. <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Bills Purc. <br> \& Disc. <br> (Rs. In Mill.) | Trend Line <br> (In \%) |
|  | 331.16 | 100.00 | 110.12 | 100.00 | 363.61 | 100.00 |
| $2061 / 62$ | 302.36 | 91.30 | 46.37 | 42.11 | 260.16 | 71.55 |
| $2062 / 63$ | 301.69 | 91.10 | 124.11 | 112.70 | 301.19 | 82.83 |
| $2063 / 64$ | 236.23 | 71.33 | 212.33 | 192.82 | 316.56 | 87.06 |
| $2064 / 65$ | 120.90 | 36.51 | 192.97 | 175.24 | 335.81 | 92.35 |

Table No. 4.45 clearly illustrate that there is a fluctuating trend in bills purchase \& discount of NIBL. The trend of bills purchase \& discount of NIBL has dropped down to lowest of $42.11 \%$ in FY 061/62 and the same has increased to highest of $192.82 \%$ in FY 063/64 but in FY 061/62 it has again gone down to $175.24 \%$. On the other side, this trend is in decreasing trend in case of NABIL \& HBL. In the entire period of study the trend has never gone above than that of the base year for both of the banks. In FY 2064/65 the trend has decreased to $36.51 \%$ in NABIL where as the trend has decreased to $92.35 \%$ in HBL. Hence, comparing these three banks NIBL stands ahead of NABIL \& HBL. Similarly, HBL stands second in this regard.

Graphically, Trend line of bills purchase \& discount of NABIL, NIBL \& HBL is presented as below.

## Graph No. 7



Graph No. 7 clearly shows the ups and downs of trend of bills purchase \& discount of these three selected banks. Higher trend line of NIBL indicates that it is more successful in investing in bills purchase \& discount in comparison to NABIL, HBL.

## 4. Trend of Operating Income.

Bank receives income from different sources such as interest received, commission \& discount, exchange income, dividend \& other income. Total amount collected from those sources are called operating income. The trend of operating of NABIL, NIBL \& HBL is presented as below.

Table No. 4.46
Trend of Operating Income

| Fiscal Year | NABIL |  | NIBL |  | HBL |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Operating <br> Income <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Operating <br> Income <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Operating <br> Income <br> (Rs. In Mill.) | Trend Line <br> (In \%) |
| $2060 / 61$ | 1573.31 | 100.00 | 427.17 | 100.00 | 1572.92 | 100.00 |
| $2061 / 62$ | 1639.11 | 104.18 | 415.68 | 97.31 | 1387.34 | 88.20 |
| $2062 / 63$ | 1340.51 | 85.20 | 577.44 | 125.18 | 1443.54 | 91.77 |
| $2063 / 64$ | 1333.65 | 84.77 | 911.95 | 213.49 | 1516.32 | 96.40 |
| $2064 / 65$ | 1438.44 | 91.14 | 1139.44 | 266.74 | 1757.89 | 111.76 |

Table No. 4.46 shows the trend of operating income of NIBL is in increasing trend where as this trend is fluctuating in case of NABIL \& HBL The operating income trend of NABIL has increased to $104.18 \%$ in the FY 061/62 but afterwards it begun to decreased. Similarly, HBL's operating income trend has gone down to $88.2 \%$ in FY 061/62 but after then it started to increase continuously in successive years and gone up to $111.76 \%$ in the last year of the study. On the other hand, the same trend in case of NIBL is increasing rapidly and reached to $266.74 \%$ in FY 2064/65. So, from the above table it is seen that the growth of operating income is better in NIBL in comparison to NABIL \& HBL.

The same situation is presented graphically as under.

## Graph No. 8



Graph No. 8 shows the trend line of operating income of these three banks. Here, the trend line of NIBL is increasing rapidly and reached to $266.74 \%$ in FY $061 / 62$. But the growth of trend line is not impressive in case of NABIL \& HBL. Trend line of these two
banks is much below than that of NIBL. Hence, from above graph it is quite obvious that NIBL is better in generating operating income than NABIL \& HBL.

## 5. Trend of Total Expenses.

Total expenses of commercial banks includes the expenses such as interest paid on deposit \& borrowings, salaries, provision for bonus, allowances and other general expenses. A bank said to be successful which has lower amount of expenses and is in process to reduce its expenses over the years. Total expenses trend of NABIL, NIBL \& HBL is presented as below.

Table No. 4.47
Trend of Total Expenses

| Fiscal Year | NAB IL |  | NIB L |  | HB L |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Total <br> Expenses <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Total <br> Expenses <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Total <br> Expenses <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) |
|  | 1075.32 | 100.00 | 324.48 | 100.00 | 1117.53 | 100.00 |
| $2061 / 62$ | 1189.73 | 110.64 | 332.08 | 102.34 | 1017.01 | 91.01 |
| $2062 / 63$ | 777.02 | 72.26 | 395.91 | 122.01 | 1071.00 | 95.84 |
| $2063 / 64$ | 723.08 | 67.24 | 658.85 | 203.05 | 1064.32 | 95.24 |
| $2064 / 65$ | 694.19 | 64.56 | 779.16 | 240.13 | 1200.73 | 107.44 |

Table No. 4.47 clearly shows that there is a fluctuating trend of total expenses during the study period for NABIL \& HBL. The total expenses trend of NABIL has increased to $110.64 \%$ in FY $061 / 62$ but has dropped down to $64.56 \%$ in FY 064/65. Similarly, the same trend of HBL has dropped down to $91.01 \%$ in FY 061/62 but has increased to $107.44 \%$ in the last year of the study. On the other hand, the same trend is in increasing trend for NIBL. It is increasing rapidly over the study period. The trend of NIBL has increased to $240.13 \%$ in FY 064/65 which is 2.4 times higher than the base year.

The same thing is shown by the graph as below.

## Graph No. 9



Graph No. 9 shows the total expenses trend line of NIBL is rapidly going upwards over the study period. Higher trend line of NIBL indicates that it incurred more expenses
than the other two banks, which is not favourable for bank. Hence, the management of NIBL should take proper decision to reduce its expenses.

## 6. Trend of Net Profit.

Net profit is actual profit earned by the bank. Every business organization centralized their activities where they can earn maximum profit. One of the best ways to analyze the overall effectiveness of the firm during the study period is to analyze their net profit trend over the year of study. Here, net profit trend of NABIL, NIBL \& HBL is presented below.

Table No. 4.48
Trend of Net Profit

| Fiscal Year | NABIL |  | NIBL |  | HBL |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Net Income <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Net Income <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Net Income <br> (Rs. In Mill.) | Trend Line <br> (In \%) |
| $2060 / 61$ | 291.37 | 100.00 | 56.41 | 100.00 | 280.69 | 100.00 |
| $2061 / 62$ | 271.63 | 93.23 | 57.10 | 101.22 | 235.02 | 83.73 |
| $2062 / 63$ | 416.25 | 142.86 | 116.82 | 207.09 | 212.12 | 75.57 |
| $2063 / 64$ | 455.32 | 156.27 | 152.67 | 270.64 | 263.05 | 93.72 |
| $2064 / 65$ | 518.63 | 178.00 | 232.15 | 411.54 | 308.28 | 109.83 |

As the table no. 4.48 depicts net profit trend of NIBL \& NABIL is in increasing trend where as the trend of net profit of HBL is fluctuating during the study period. The growth trend of net profit in case of NIBL is more than 4 times higher than the base year. Net profit trend of NABIL is also in increasing form but the rate of trend is not as rapid as comparison to NIBL. NABIL has average increasing trend of net profit. On the other hand, HBL's trend of net profit is fluctuating. It has gone down to lowest of $75.57 \%$ in FY 2062/63 then after it begun to increase and has increased to $109.83 \%$ in FY 2064/65. So, it is quite clear that the growth of net profit is better of NIBL than that of NABIL \& HBL.

Graphically, trend line of net profit of three banks is presented below.

## Graph No. 10



From the Graph No. 10, it is clearly seen that the net profit trend line of NIBL is rapidly going up wards every successive year during the study period in comparison to

NABIL \& HBL. It indicates that NIBL is performing its activities more effectively than other two banks. Similarly, the higher trend line of NABIL in comparison to HBL indicates that NABIL is more effective than HBL in this regard.

## 7. Trend of Interest Earning.

Interest earning is the major source of income of commercial bank. Bank receives interest on its investment such as loan \& advances, money at call \& short notice, investment is government securities cash credit \& overdrafts, investment in foreign bank etc. Here, the interest earning trend of NABIL, NIBL \& HBL is calculated to compare the improvement of interest earning during the study period.

Table No. 4.49
Trend of Interest Earning

| Fiscal Year | NAB IL |  | NIB L |  | HBL |  |
| :---: | ---: | :---: | ---: | :---: | ---: | :---: |
|  | Interest <br> Earned <br> (Rs. In Mill.) | Trend Line <br> (In \%) | Interest <br> Earned <br> (Rs. In Mill.) | Trend <br> Line <br> (In \%) | Interest <br> Earned <br> (Rs. In Mill.) | Trend Line <br> (In \%) |
|  | 1266.70 | 100.00 | 349.76 | 100.00 | 1326.38 | 100.00 |
| $2061 / 62$ | 1120.18 | 88.43 | 326.22 | 93.27 | 1149.00 | 86.63 |
| $2062 / 63$ | 1017.87 | 80.36 | 459.51 | 131.38 | 1201.23 | 90.56 |
| $2063 / 64$ | 1001.62 | 79.07 | 731.40 | 209.11 | 1245.89 | 93.93 |
| $2064 / 65$ | 1068.75 | 84.37 | 886.80 | 253.55 | 1446.47 | 109.05 |

Table No. 4.49 shows the interest earning trend of three banks over the study period. As the table depicts, the interest earning trend of NIBL is in increasing trend, where as it is fluctuating in HBL and decreasing in case of NABIL. The trend in FY 2064/65 has increased to $253.55 \%$ in NIBL which is a sign of good performance of interest earning on its investment. Although the trend of HBL has dropped down to $86.63 \%$ in FY 061/62 but it has started to increase afterwards and gone up to $109.05 \%$ in FY 064/65. It shows that HBL is in process to improve its interest earning capacity. On the other hand, there is no any sign of improvement in case of NABIL. The trend of interest earning in case of NABIL has always down as regard to base year. It has dropped down to $84.37 \%$ in FY 2064/65 which is almost 3 times lower than that of NIBL.

As already said bank earns interest earned on its investment. Hence, the growth of interest earning has to be relatively similar to the growth of investment made by the bank. Here, in case of NABIL there is no any significant difference between growth of interest earning and the growth of investment. But in case of NIBL and HBL it is seen that there is a difference between the growth of interest earning and the growth of investment. Trend of total investment shows that there is a growth of 3.2 times in investment in case of NIBL and 1.4 times in case of HBL but here trend of interest earning shows that there is only a growth of 2.5 times and 1.1 times in interest earning respectively. This shows that these two banks are not earning interest at the same rate at which they have made their investment.

The same thing is plotted in graph as below.

## Graph No. 11



From Graph No. 11, it is clear that NIBL's trend line of interest earning is higher than HBL \& NABIL. It indicates that the interest earning growth of NIBL is better than HBL \& NABIL. While comparing among NABIL \& HBL, higher trend line of HBL shows it is better than NABIL in this regard.

## Chapter - 5

## SUMMARY, CONCLUSION AND RECOMMENDATION

This present study is an attempt to compare the financial performance of three selected banks (i.e. NABIL, NIBL \& HBL). The study is divided into five main chapters. They are Introduction, Review of Literature, Research Methodology, Presentation \& Analysis of Data, and Summary, Conclusion \& Recommendation.

The first chapter deals with the background of the study, focus of the study, statement of the problem, objective of the study, significance of the study, limitation of the study, research design \& organization of the study.

The second chapter covers the conceptual review of financial performance, concept \& meaning of commercial banks, history, function of commercial banks, problems of banking in Nepal, legislation relating to commercial banking activities in Nepal, concept of financial statement, concept of financial statement analysis and significance of financial statement analysis. In this chapter review of related publication \& study and review of related previous research study have been discussed. Similarly, review of research tools used in this study has also been described.

The third chapter consists of research design, population and sample, nature \& source of data, period covered, data collection and processing techniques and method of analysis.

The fourth chapter is a main part of the study. In this chapter data required for the study are presented, analyzed and interpreted by using appropriate tools of finance and statistics.

This fifth chapter, summary \& conclusion derived from the study are highlighted. Some prescribed suggestions and recommendations also have been mention forwarded for the improvement of the future performance of NABIL, NIBL \& HBL.

## A. Summary

In this research work a range of analysis has been done in order to assess the financial performance of three selected banks. The available data of three banks for the period of 060/61 to 064/65 are analyzed by using various financial and statistical tools. Summarized form of the analysis section of this study is mentioned below.

## 1. Liquidity Analysis:

For the purpose of maintaining liquidity NRB has directed to all the commercial banks to maintain certain percentage of deposit as cash \& bank balance. Here, the average liquidity position of NABIL, NIBL \& HBL is $0.72,1.18 \& 0.84$ respectively. NIBL has always maintained the requirement level except in FY 061/62 where it fails to maintain required liquidity only by 0.02 . On the other side, HBL has maintained the same level only in FY 062/63 where as NABIL was unable to maintain the requirement level in the whole period of study.

## 2. Deposit Utilization:

a. The average of cash \& bank balance to total deposit of NABIL, NIBL \& HBL is $6.23 \%, 10.07 \% \& 8.32 \%$ respectively. The coefficient of variation of NABIL is $25.77 \%$, NIBL is $12.08 \%$ \& HBL is $11.02 \%$.
b. The average of cash \& bank balance to total deposit (excluding fixed deposit) of NABIL is $7.54 \%$, NIBL is $13.59 \%$ \& HBL is $10.89 \%$. The coefficient of variation of NABIL, NIBL \& HBL is $25.21 \%, 16.87 \%$ \& $6.32 \%$ respectively.
c. The average of cash \& bank balance to current deposit of NABIL, NIBL \& HBL is $32.24 \%, 72.47 \%$ \& $51.29 \%$ respectively. Coefficient of variation of NABIL, NIBL \& HBL is $22.08 \%, 26.14 \%$ \& $15.86 \%$ respectively.

## 3. Activity Analysis:

In this section of the study, fund structure, deposit structure, investment structure of NABIL, NIBL \& HBL is analyzed to assess how efficiently these banks are collecting their funds and utilizing it in business activities.
a. The average fund structure of NABIL consist of $91.64 \%$ total deposit and $8.36 \%$ net worth, similarly fund average structure of NIBL consist of $91.58 \%$ total deposit \& $8.42 \%$ net worth. Where as average fund structure of HBL consists of $95.06 \%$ total deposit and $4.94 \%$ net worth. Coefficient of variation of total deposit in NABIL, NIBL \& HBL is $1.65 \%, 2.03 \%$ \& $0.77 \%$ respectively. Similarly, coefficient of variation of net worth of these banks is $18.12 \%, 22.08 \%$ \& $14.75 \%$ respectively.
b. The average deposit structure of NABIL consist of $19.25 \%$ current deposit, $38.52 \%$ saving deposit, $17.33 \%$ fixed deposit and $24.90 \%$ call \& other deposit. Likewise, average deposit structure NIBL consist of $14.67 \%$ current deposit, $36.07 \%$ saving deposit, $25.04 \%$ fixed deposit and $24.22 \%$ call \& other deposit. The average deposit structure in case of HBL consist of $16.57 \%$ current deposit, $51.67 \%$ saving deposit, $23.76 \%$ fixed deposit and $8.00 \%$ call and other deposit.
Coefficient of variation of current deposit, saving deposit, fixed deposit and call \& other deposit in case of NABIL is $9.25 \%, 16.87 \%, 18.43 \% \& 22.90 \%$ respectively. Where as coefficient of variation of current deposit, saving deposit, fixed deposit \& call and other deposit in case of NIBL is $21.45 \%, 20 \%, 28.11 \%$ \& $31.43 \%$ respectively. Similarly, coefficient of variation of current deposit, saving deposit \& call and other deposit of HBL is $16.86 \%, 2.65 \%, 21.43 \%$ \& $54.85 \%$ respectively.
c. The average investment structure of NABIL consist of $3.94 \%$ money at call \& short notice, $53.11 \%$ loan, advances \& overdraft, $1.68 \%$ bills purchase \& discount, $21.54 \%$ government securities and $19.73 \%$ other investment. Similarly, average investment structure of NIBL consist of $0.85 \%$ money at call \& short notice, $63.41 \%$ loan, advances \& overdraft, $1.69 \%$ bills purchase \& discount, $9.75 \%$ government securities and $24.29 \%$ other investment. In the same way, average investment structure of HBL consist of $5.97 \%$ money at call \& short notice, $49.71 \%$ loan, advances \& overdraft, $1.57 \%$ bills purchase \& discount, $17.49 \%$ government securities, and $25.26 \%$ other investment.
The coefficient of variation of money at call \& short notice, loan advances \& overdraft, bills purchase \& discount, government securities and other investment in case of NABIL is $53.90 \%, 13.72 \%, 28.90 \% ~ 21.42 \%$ \& $35.58 \%$ respectively. Similarly, it is $119.05 \%, 12.90 \%, 29.12 \%, 52.05 \%$ \& $43.01 \%$ respectively in case of NIBL, and $148.50 \%, 4.86 \%, 17.67 \%, 18.42 \%$ \& $30.58 \%$ respectively in case of HBL.
d. The average proportion of total investment to total deposit of NABIL, NIBL \& HBL is $105.18 \%, 99.99 \% \& 98.00 \%$ respectively. The coefficient of variation of NABIL, NIBL \& HBL is $2.32 \%, 3.59 \%$ \& $0.82 \%$ respectively.
e. The mean proportion of loan \& advances to total deposit of NABIL, NIBL \& HBL is $56.00 \%, 63.16 \%$ \& $48.72 \%$ respectively. The coefficient of variation of NABIL is $15.54 \%$, NIBL is $10.06 \%$ \& HBL is $4.95 \%$.
f. The mean proportion of loan \& advances to total deposit (excluding current deposit) of NABIL, NIBL \& HBL is $69.45 \%, 73.91 \%$ \& $58.49 \%$ respectively. The coefficient of variation of NABIL, NIBL \& HBL is $16.15 \%, 7.52 \% \& 6.97 \%$ respectively.

## 4. Profitability Analysis:

The profitability analysis is done to assess the earning pattern as well as profitability pattern of NABIL, NIBL \& HBL.
a. The mean return on net worth of NABIL, NIBL \& HBL is $28.96 \%, 16.37 \%$ \& $25.23 \%$ respectively. Coefficient of variation in case of NABIL is $10.48 \%, 25.07 \%$ in NIBL \& $29.5 \%$ in HBL.
b. The average return on total deposit of NABIL, NIBL \& HBL is $2.69 \%, 1.42 \%$ \& $1.26 \%$ respectively. Similarly, coefficient of variation of NABIL, NIBL \& HBL is $27.8 \%, 8.14 \%$ \& $15.17 \%$ respectively.
c. The average return on total investment of NABIL, NIBL \& HBL is $6.79 \%, 4.54 \%$ \& $3.40 \%$ respectively. Coefficient of variation of NABIL, NIBL \& HBL is $47.01 \%$, $34.58 \%$ \& $51.64 \%$ respectively.
d. The average earning per share (EPS) of NABIL, NIBL \& HBL is Rs. 79.45, Rs. 39.51 \& Rs. 60.05 respectively. Where as the coefficient of variation of EPS is $24.35 \%$, $16.93 \%$ \& $28.88 \%$ in case of NABIL, NIBL \& HBL respectively.

## 5. Analysis of Other Financial Indicators:

a. The mean proportion of operating expenses to net interest of NABIL is $78.53 \%$, NIBL is $90.64 \%$ \& HBL is $78.03 \%$. Similarly, the coefficient of variation of NABIL, NIBL \& HBL is $24.95 \%, 9.94 \%$ \& $6.67 \%$ respectively.
b. The average interest paid to interest earned of NABIL, NIBL \& HBL is $33.82 \%$, $42.49 \%$ \& $46.0 \%$ respectively. The fluctuation of interest paid to interest earned of NABIL, NIBL \& HBL is $24.92 \%, 6.37 \%$ \& $13.68 \%$ respectively.
c. The average proportion of total interest earned to total investment of NABIL is $17.84 \%$, NIBL is $20.82 \%$ \& HBL is $16.52 \%$. Similarly, the coefficient of variation of NABIL is $21.38 \%$, NIBL is $16.91 \%$ \& HBL is $48.4 \%$.
d. The average price earning ratio ( $\mathrm{P} / \mathrm{E}$ ratio) of NABIL, NIBL \& HBL is $14.47,23.16$, and 17.17 respectively. The fluctuation of P/E ratio of NABIL is $39.81 \%$, NIBL is $25.55 \%$ \& HBL is $6.29 \%$.
e. The average market value to book value of NABIL, NIBL \& HBL is $4.12,3.62$ \& 4.28 respectively. Where as the coefficient of variation of NABIL is $36.8 \%$, NIBL is $16.56 \%$ \& HBL is $24.98 \%$.

## 6. Income \& Expenditure Analysis:

a. The average percentage income from interest in case of NABIL, NIBL \& HBL is $74.68 \%, 79.59 \%$ \& $82.96 \%$ respectively. The average percentage income form commission \& discount of NABIL, NIBL \& HBL is $9.00 \%$, $5.82 \%$ \& $7.63 \%$. Similarly, income from foreign exchange of NABIL, NIBL \& HBL is $11.20 \%$, $9.88 \%$ \& $7.52 \%$ respectively. The average percentage income from other sources of NABIL is $5.12 \%$, NIBL is $4.71 \%$ and $1.88 \%$ in HBL.
b. The average percentage expenses on interest of NABIL, NIBL \& HBL is $41.54 \%$, $46.49 \%$ \& $53.43 \%$ respectively. The average percentage expenses on staff of NABIL
is $21.32 \%$, NIBL is $12.92 \%$ and $11.46 \%$ in HBL. Similarly, expenses on provision for bonus of NABIL, NIBL \& HBL is $7.84 \%, 3.85 \% ~ \& ~ 4.22 \%$ respectively. And the average percentage expenses on other general expenses in case of NABIL is $29.30 \%$, NIBL is $36.74 \%$ \& $30.90 \%$ in HBL.

## 7. Correlation Analysis:

## a. Correlation between Total Deposit \& Total Investment.

The correlation coefficient between total deposit \& total investment of NABIL, NIBL \& HBL is $0.932,0.999 \& 0.998$ respectively. So, there is positive and very high degree of correlation between total deposit \& total investment of three banks. Similarly, coefficient of determination between total deposit \& total investment of NABIL, NIBL \& HBL is $86.8 \%, 99.7 \%$ \& $99.6 \%$ respectively.
b. Correlation between Interest Earned \& Interest Paid.

The correlation coefficient between interest earned \& interest paid of NABIL, NIBL $\&$ HBL is $0.900,0.988 \& 0.228$ respectively. So, there is positive correlation between these variables of three banks. Similarly, coefficient of determination between interest earned \& interest paid of NABIL, NIBL \& HBL is $81 \%, 97.7 \%$ \& $5.2 \%$ respectively.

## c. Correlation between Interest Earned \& Operating Profit.

The correlation coefficient between interest earned \& operating profit in case of NABIL, NIBL \& HBL is $-0.456,0.981 \& 0.973$ respectively. So, there is positive \& high degree of correlation between these variables for NIBL \& HBL. But in case of NABIL there is negative correlation between these variables. Where as the coefficient of determination between interest earned \& operating profit of NABIL, NIBL \& HBL is $20.8 \%, 96.3 \%$ \& $94.7 \%$ respectively.

## 8. Trend Analysis:

Trend analysis shows the percentage change in several years. Moreover, it examines whether the financial position of a firm is improving or deteriorating over the years.

## a. Trend of Total Deposit.

Growth of total deposit in relation to the base year (first year) for four successive years of NABIL is $97.90 \%, 84.90 \%, 89.14 \% \& 92.09 \%$ respectively. In case of NIBL is $98.09 \%, 186.15 \%, 270.77 \%$ \& $334.91 \%$ respectively. And in case of HBL is $106.20 \%$, $119.82 \%, 125.54 \%$ \& $141.53 \%$ respectively.

## b. Trend of Fixed Deposit.

In comparison to first year of study growth trend of fixed deposit for four successive years are $65.79 \%$, $60.57 \% ~ 62.13 \% ~ \& ~ 55.89 \% ~ i n ~ N A B I L . ~ A n d ~ 57.03 \%, ~$ $100.85 \%$, $138.35 \%$ \& $193.67 \%$ in NIBL and in case of HBL it is $111.23 \%, 65.05 \%$, $95.59 \%$ \& $123.95 \%$ respectively.

## c. Trend of Saving Deposit.

There is an increasing trend of saving deposit through out the study period of NABIL, NIBL \& HBL. Increasing trend of saving deposit of NABIL for last four years of study period are $101.12 \%, 106.36 \%, 121.90 \%$ \& $142.89 \%$ respectively. The same trend of NIBL is $101.53 \%, 193.24 \%, 387.92 \%$ \& $532.21 \%$ respectively. And in case of HBL, it is $100.21 \%, 118.88 \%, 128.60 \% \& 140.55 \%$ respectively.

## d. Trend of Net worth.

Growth of net worth for four successive years to the first year of the study of NABIL is $107.86 \%, 123.65 \%, 139.41 \%$ \& $155.96 \%$ respectively. In case of NIBL, it is $111.59 \%, 136.12 \%, 155.42 \%$ \& $251.59 \%$ respectively. And it is $119.09 \%, 147.54 \%$, $183.76 \%$ \& $213.95 \%$ respectively in case of HBL. So, there is an increasing trend of net worth through out the study period of three banks.
e. Trend of Total Investment.

Trend of total investment for last four years of the study of NABIL is $94.64 \%$, $87.31 \%, 90.26 \%$ \& $94.93 \%$ respectively. Similarly, in case of NIBL, it is $99.68 \%$, $171.05 \%, 257.34 \%$ \& $323.31 \%$ respectively and it is $107.25 \%, 118.36 \%, 125.86 \%$ \& $143.00 \%$ respectively in case of HBL.

## f. Trend of Loan \& Advances.

The Trend of loan \& advances in comparison to the base year for four successive years of NABIL is $89.27 \%, 93.26 \%, 99.51 \% \& 130.93 \%$ respectively. Similarly, in case of NIBL it is $108.59 \%, 243.56 \%, 298.32 \% ~ \& ~ 428.35 \%$ respectively and it is $100.02 \%$, $112.125,134.49 \%$ \& $139.73 \%$ respectively in case of HBL.

## g. Trend of Bills Purchase \& Discount.

Change proportion of bills purchase \& discount in relation to the base year for four successive year of NABIL is $91.3 \%, 91.1 \%, 71.33 \%$ \& $36.51 \%$ respectively. Likewise, it is $42.11 \%, 112.70 \%, 192.82 \%$ \& $175.24 \%$ respectively in case of NIBL, and in case of HBL, it is $71.55 \%, 82.83 \%, 87.06 \%$ \& $92.35 \%$ respectively.

## h. Trend of Operating Income.

Growth of operating income in comparison to the base year for four successive years of NABIL is $104.18 \%, 85.20 \%, 84.77 \%$ \& $91.14 \%$ respectively. In case of NIBL, it is $97.31 \%, 125.18 \%, 213.49 \%$ \& $266.74 \%$ respectively. Similarly, it is $88.20 \%, 91.77 \%$, $96.40 \%$ \& $111.76 \%$ respectively in case of HBL.

## i. Trend of Total Expenses.

The trend of total expenses for last four years of the study of NABIL is $110.64 \%$, $72.26 \%$, $67.24 \%$ \& $64.56 \%$ respectively. And of NIBL, it is $102.34 \%, 122.01 \%$, $203.05 \%$ \& $240.13 \%$ respectively. Similarly, it is $91.01 \%, 95.84 \%, 95.24 \%$ \& $107.44 \%$ respectively in case of HBL.

## j. Trend of Net Profit.

Trend of Net Profit shows the change percentage of net profit for four successive years of the study in relation to the base year. In case of NABIL it is $93.23 \%, 142.86 \%$, $156.27 \%$ \& $178 \%$ respectively, and in case of NIBL it is $101.22 \%, 207.09 \%, 270.64 \%$ \& $411.54 \%$ respectively. The same trend of HBL is $83.73 \%, 75.57 \%, 93.72 \%$ \& $109.83 \%$ respectively.

## k. Trend of Interest Earning.

The trend of interest earning in comparison to the base year for four successive years of NABIL is $88.43 \%, 80.36 \%, 79.07 \% \& 84.37 \%$ respectively. Similarly, in case of NIBL it is $93.27 \%, 131.38 \%, 209.11 \%$ \& $253.55 \%$ respectively. And in case of HBL it is $86.63 \%, 90.56 \%, 93.93 \%$ \& $109.05 \%$ respectively.

## B. Conclusion of the study.

The major findings or conclusions of the study are as follows.

## 1. Liquidity:

Commercial banks are directed by NRB to maintain certain percentage of deposit as cash and bank balance for better liquidity position. The liquidity analysis reveals that overall liquidity of NIBL is better than that of NABIL \& HBL. NIBL has maintained the required level of cash and bank balance during the study period except in FY 058/59. On the other hand, NABIL \& HBL fail to maintain sufficient cash and bank balance as per NRB regulation. HBL has maintained required level of cash and bank balance only in FY 059/60 where as NABIL has not maintained required level of cash and bank balance in any fiscal year. Hence, NIBL is more capable in meeting its short term obligation or unanticipated call of deposit than the other two banks. That means NIBL is capable to pay back money to its depositors when they demand but NABIL \& HBL may fail to meet their obligations.

## 2. Deposit Utilization:

a. On the basis of cash and bank balance to total deposit, it is quite clear that overall deposit utilization position of NABIL is better than that of NIBL \& HBL. The reason is that, NABIL fails to maintain required level of liquidity. Lower the liquidity position is maintained, higher the funds will be available for utilization. Similarly, HBL is more successful in utilizing their deposits than NIBL. From the liquidity point of view, NIBL is maintaining enough cash and bank balance which is the symbol of lower volume of deposit utilization.
b. On the basis of cash and bank balance to total deposit (excluding fixed deposit), it is found that NABIL has lowest proportion of cash and bank balance to total deposit (excluding fixed deposit) among three banks. The reason behind this may be because NABIL has not maintained required level of cash and bank balance in comparison to NIBL \& HBL. Similarly, the deposit structures of these three banks show that NABIL has higher proportion of other deposits apart from fixed deposit that the NIBL \& HBL. Lower proportion of cash and bank balance to total deposit (excluding fixed deposit) of NABIL indicates that NABIL is utilizing short term deposits in higher proportion comparatively. It indicates that NABIL is adopting risky way in utilizing deposit.
c. As regards cash and bank balance to current deposit NIBL is maintaining high liquidity to meet its unanticipated calls on current and other deposit. Where as NABIL \& HBL are maintaining less liquidity to meet their current deposit during the study period. In other words, it can also be said that NABIL \& HBL are utilizing the funds collected from current deposit more than NIBL. This may be riskier because such types of deposit can be called at any time.

## 3. Activity Analysis:

While making analysis of the activity of three banks, the following findings are revealed.
a. Fund structure of three banks reveals that NABIL \& NIBL are maintaining net worth \& total deposit more or less in the same proportion on the average. While HBL is maintaining low portion of net worth and high portion of total deposit than that of NABIL \& NIBL. High percentage of net worth of NABIL \& NIBL indicates that they
are financially strong than HBL, where as high percentage of total deposit of HBL indicates that it depends more on outsiders fund than NABIL \& NIBL.
b. From the deposit structure it is known that NIBL has higher proportion of fixed deposit than that of NABIL \& HBL. This indicates that NIBL is more capable of making investment on long term assets than the other two banks. Similarly, HBL has higher proportion of saving deposit than that of NABIL \& NIBL. It indicates that it has more capital to invest on medium term or short term assets than NABIL \& NIBL. Proportion of current deposit is significantly higher in NABIL than in NIBL \& HBL. It indicates that NABIL is more capable of investing on very short term loan than NIBL \& HBL. Than means the policy of depending on short term investment is better for NABIL. Generally, such fund is not utilized because risk arises due to inability to meet depositor's demands.
c. Investment structure of three banks reveals that these banks are making high proportion of investment on loans, advances \& overdrafts, but this proportion of NIBL is higher than that of NABIL \& HBL, and NABIL is higher than that of HBL in this regard. It means NIBL makes investment comparatively more on long term source than NABIL \& HBL. Likewise, NABIL makes more investment on long term source than HBL. Higher proportion of money at call \& short notice and government securities of NABIL \& HBL indicates that NABIL \& HBL follows the policy of making investment more on short term loan in comparison to NIBL. Similarly, higher percentage of other investment of NIBL \& HBL shows that these banks are investing their finds more on foreign banks, local banks \& mutual funds than that of NABIL. However, HBL is comparatively ahead among these three banks in this regard.
d. Total investment in relation to total deposit of NABIL is higher than that of NIBL \& HBL. This indicates that NABIL has utilized its total deposits for investment purpose more efficiently than the other two banks. Similarly, NIBL has higher deposit utilization capacity than HBL because the proportion of total investment to total deposit of NIBL is greater than HBL. Although the proportion of total investment in relation to total deposit is lower of HBL than the NABIL \& NIBL, but the consistency of utilizing total deposits for investment is better of HBL than NABIL \& NIBL.
e. NIBL has better utilization of total deposit for investing in loan \& advances compared to NABIL \& HBL. In the same way, NABIL is using comparatively more total deposits in granting loan \& advances than that of HBL.
f. Loan \& advances to total deposit (excluding current deposit) of NIBL is greater than that of NABIL \& HBL. It reveals that NIBL has better utilization of fixed \& saving deposit in investing loan \& advances than the other two banks. Since investing current deposits in such investment like loan \& advances will be riskier due to liquidity. Therefore, utilization of fixed and saving deposit in loans and advances shows the better performance of the bank. So, NIBL stands first among these three banks where as NABIL stands ahead of HBL.

## 4. Profitability Analysis:

While making profitability analysis following conclusions can be drawn.
a. As regard to return on net worth, NABIL is ahead of NIBL \& HBL, where as HBL is ahead of NIBL. It indicates that NABIL has utilized its shareholder's fund more effectively in profit yielding purpose than that of NIBL \& HBL. However, HBL is performing more efficiently than that of NIBL in this regards.
b. Higher percentage of return in relation to total deposits of NABIL indicates that NABIL is more efficient to utilize its total deposit for profit yielding purpose than the other two banks. Similarly, higher percentage of return on total deposit of NIBL in comparison to HBL indicates that NIBL is more effectively utilizing its total deposit in generating profit than the HBL.
c. NABIL has higher rate of return on total investment in comparison to NIBL \& HBL. It indicates that NABIL has made their investment more proficiently for profit generating purpose than the other two banks. Further, it also portrait that investment policy of NABIL is quite better than that of NIBL \& HBL. Similarly, higher return on total investment of NIBL in comparison to HBL shows that NIBL is performing more efficiently than that of HBL in this regard.
d. With reference to earning per share (EPS), NABIL is ahead than NIBL \& HBL. It means NABIL's earning on per share is higher in comparison to NIBL \& HBL. In this respect HBL is better than that of NIBL. Although the EPS of NIBL is lowest among these three banks, the coefficient of variation shows that it is more consistent in earning on per share basis that the other two banks.

## 5. Analysis of Other Financial Indicators:

On the basis of analysis of other financial indicators following findings are revealed.
a. Lower operating expenses to net interest of HBL shows the higher profitability position of HBL. Where as higher operating expenses to net interest of NIBL indicates that NIBL pays more operating expenses out of its net interest than the other two banks.
b. The percentage of interest paid to interest earned of NABIL is lower than that of NIBL \& HBL. It means NABIL pays less interest with regards to interest earned than the NIBL \& HBL. This is because the deposit structure of NABIL contains either low interest bearing deposit or no interest bearing deposit in comparison to NIBL \& HBL. Where as HBL pays comparatively more interest with regard to interest earned than NIBL. This is because the deposit structure of HBL contains high interest bearing deposit (i.e. saving \& fixed deposit) than that of NIBL.
c. Interest is the major source of earning of the bank and it is earned on the investment make by the bank. Total interest earned to total investment shows that NIBL is earning more interest on its total investment than NABIL \& HBL. It means NIBL has effectively invested its funds to earn more interest among these three banks. Similarly, NABIL is performing more efficiently than HBL is this regards.
d. Average price earning ratio (P/E ratio) of NIBL is higher than that of NABIL \& HBL, it reveals that NIBL has higher market value per share over earning per share than other two banks and the investor will prefer to invest in the share of NIBL instead of NABIL \& HBL because they will recover their investment quickly. Similarly, HBL stands ahead of NABIL in this regards.
e. Average market value to book value of HBL is higher than that of NABIL \& NIBL. It reveals that the stock of HBL is over priced than that of NABIL \& NIBL. Higher average of NABIL in comparison to NIBL indicates that the stock of NABIL is over priced than that of NIBL.

## 6. Income \& Expenditure Analysis:

While making income and expenditure analysis following conclusions are drawn.
a. Income Analysis:

- Income analysis reveals that in case of HBL contribution of interest earning to total income is higher than that of NABIL \& NIBL. High percentage contribution of interest earned to total income of HBL indicates that out of various sources of income, income earned from interest contributed to its total income more than that of other two banks. In other words, it indicates the contribution of other sources of income to total income of HBL is lower than that of NABIL \& NIBL. Similarly, the percentage contribution of interest earning to total income of NIBL is higher in comparison to NABIL. This means out of various sources of income the proportion of interest earning to total income of NIBL higher than that of HBL.
- The proportion of commission \& discount, foreign exchanges \& other income to total income is higher of NABIL than the other two banks. Where as, the contribution of foreign exchange and other income to total income is higher of NIBL compared to HBL. The contribution of commission and discount to total income is greater of HBL than that of NIBL.


## b. Expenditure Analysis:

- Expenditure analysis reveals that interest expenses of NABIL, NIBL \& HBL occupies major proportion of total operating expenses. While among three banks HBL has higher proportion of interest expenses than other two banks. It means HBL pays more interest to its depositors \& borrowings as compared to NABIL \& NIBL. While NIBL stood ahead of NABIL in this regard. In other words, NIBL pays more interest on its deposits and borrowing than that of NABIL.
- The proportion of staff expenses to total expenses of NABIL is significantly higher than that of NIBL \& HBL. So, it is quite obvious that NABIL is spending more expenses on its staff salaries \& allowances, training expenses and other expenses relating to its personnel than the other two banks. However, NIBL \& HBL spend more or less similar on its staff; the difference of spending expenses on staff is slightly higher of NIBL than HBL.
- The proportion of provision for bonus of NABIL is higher than that of NIBL \& HBL. Higher payment of bonus by NABIL means it has higher profitability in comparison to NIBL \& HBL. Similarly, HBL has higher profitability in comparison to NIBL.
- Lower proportion of other general expenses of NABIL indicates that it is more successful to reduce its operating expenses than the other two banks. On the other hand the higher proportion of other general expenses of NIBL indicates that it is unable to reduce its operating expenses than other two banks.


## 7. Correlation Analysis:

While analyzing the correlation between the variables the following conclusions are drawn.
a. There is perfect positive correlation between total deposit and total investment of NABIL, NIBL \& HBL. On the basis of coefficient of determination it is known that when there is a change in total deposit it brings $86.8 \%$ change in total investment of

NABIL, $99.7 \%$ change in total investment of NIBL and $99.6 \%$ change in total investment of HBL. Therefore, the degree of closeness between these two variables of NIBL is higher than that of NABIL \& HBL.
b. There is positive correlation between interest earned and interest paid of NABIL, NIBL \& HBL. But among these three banks HBL has lowest correlation (0.288) between interest earned \& interest paid. Where as it is highly correlated in case of NABIL \& NIBL. On the basis of coefficient of determination it is concluded that when there is a change in interest earned, it brings $81 \%$ change in interest paid of NABIL, $97.7 \%$ change in interest paid of NIBL and $5.2 \%$ change in interest paid of HBL. Hence, the degree of closeness between these two variables of NIBL is greater than that of NABIL \& NIBL.
c. There is a positive and very high degree of correlation between interest earned and operating profit of NIBL \& HBL. But in case of NABIL there is negative correlation between interest earned \& operating profit. Generally, interest earned and operating profit are positively correlated but here in case of NABIL it is negatively correlated. It is because the interest earning of NABIL is in decreasing trend but the operating profit is in increasing trend. On the basis of coefficient of determination, it is known that when there is a change in interest earned it brings $96.3 \%$ change in operating profit of NIBL \& $94.7 \%$ change in operating profit of HBL. But in case of NABIL change in interest earned brings $20.8 \%$ opposite change in operating profit which generally does not happen. Therefore, it can be said that interest earned and operating profit are not relatively correlated in case of NABIL.

## 8. Trend Analysis:

While making analysis of trend following conclusions are drawn.
a. The total deposit trend of NIBL \& HBL is in increasing trend where as the same trend of NABIL is in decreasing trend. While comparing these three banks NIBL has higher growth rate of total deposit than HBL \& NABIL. Similarly, HBL has higher growth rate of total deposit than that of NABIL.
b. As regards to the fixed deposit trend, NIBL is ahead among these three selected banks. It is seen that the fixed deposit trend on NIBL is in increasing trend, it is fluctuating in case of HBL where as it is in decreasing trend in case of NABIL. The fixed deposit trend of NABIL shows that it is very poor in collection fixed deposit in comparison to other two banks.
c. As far as the collection of saving deposit is concerned, all three banks have increases the volume of saving deposit. While comparing these three banks, it is seen that NIBL has very high rate of growth than that of other two banks. The growth rate of saving deposit in case of NIBL is more than 3.5 times higher than that of NABIL \& HBL. On the other hand the increasing trend of saving deposit is almost identical between NABIL \& HBL.
d. So far the net worth trend is concerned; there is an increasing trend in case of all three selected banks. Though these three banks have increases the volume of net worth, the growth rate of NIBL is higher than that of HBL \& NABIL and similarly, HBL has higher growth rate than that of NABIL.
e. The total investment trend is increasing in case of NIBL \& HBL where as the same trend of NABIL is in decreasing trend. While comparing growth rate of investment among three banks, it is found that NIBL has higher growth rate than that of other
two banks. NABIL's trend of that investment shows that it is poorest among three banks. It is also found that the growth trend of total deposit and total investment of concerned banks are almost identical. This indicates that, these banks have made their investment at the same rate in which they have collected their deposits.
f. Trend of loans \& advances are in increasing trend in case of NIBL \& HBL. But the same trend of NABIL has been fluctuating over the years. The growth rate of loans \& advances in case of NIBL is more than 3 times higher in comparison to NABIL \& HBL. This clearly indicates that NIBL is providing its great portion as loans \& advances than that of other two banks.
g. As far as investment on bills purchase and discount is concerned, all three banks are fluctuating during the study period. However, NIBL has performed better in comparison to NABIL \& HBL. NABIL's trend of bills purchase and discount is poorest among three banks.
h. The trend of operating income of three selected banks shows that there is an increasing trend in case of NIBL where as the same trend has been fluctuating over the years in case of NABIL \& HBL. Higher growth rate of NIBL indicates that it is performing efficiently for the purpose of maximizing operating income in comparison to other two banks.
i. As regards the trend of expenses, the analysis shows that there is a fluctuating trend of total expenses during the study period for NABIL \& HBL. The fluctuation is more in HBL than NABIL. On the other hand, the same trend is in increasing trend for NIBL. It is increasing rapidly over the study period which is 2.4 times higher than the base year.
j. The overall trend of net profit is comparatively better in case of NIBL. Though net profit trend of NABIL is also in increasing form but the rate of trend is not as same as the rate of NIBL. The growth trend of net profit of NIBL is more than 2 times higher than that of NABIL. On the contrary, the trend of net profit is fluctuating during the study period in case of HBL.
k. As far as the interest earning trend is concerned, NIBL is having high rate of interest earning in comparison to NABIL \& HBL. The reason behind high rate of interest earning in case of NIBL is due to its high rate of investment than the other two banks. On the other hand, trend of interest earning in case of HBL is fluctuating during the study period where as it is decreasing in NABIL.
Hence, the overall trend analysis shows that NIBL has rapidly increasing trend than the other two banks. If this trend remains to continue, NIBL will collect more deposit, invest more funds \& earn more interest in future. These factors are responsible for higher profitability. Where as the future profitability of HBL will be higher than that of NABIL. Trend analysis also reveals that potentiality of future profit is higher in NIBL in comparison to NABIL \& HBL

## C. Recommendations:

On the basis of analysis and interpretation of data, the following recommendations are made for the improvement of future performance of concerned banks i.e. NABIL, NIBL \& HBL.

1. NABIL and HBL are not maintaining their liquidity position almost all the years of study period. So, it is suggested that they should assess the liquidity requirement and should maintain enough liquidity to meet the demand of their depositors.
2. NIBL is maintaining excess cash \& bank balance, which is the symbol of idle fund. Hence, it is suggested to mobilize its idle fund in short term loan that matures shortly and can be rediscounted.
3. The proportion of net worth is comparatively low in HBL, which is not good for long run viability of the bank. So, it is suggested to improve the proportion, this can be done by retaining earnings and keeping low dividend payout ratio.
4. NABIL should change its present deposit structure i.e. it should increase proportion of fixed deposit in its deposit structure because it is more reliable source of fund and can be used for long and more profitable sector.
5. NABIL \& HBL are suggested to invest more on loan, advances and overdraft, which is a long term investment and yields high rate of returns.
6. NIBL has comparatively low average proportion of EPS. So, it is suggested to NIBL to increase the degree of profitability.
7. NIBL has comparatively higher proportion of operating expenses, which affects its profitability adversely. So, it is suggested to reduce its operating expenses for greater profitability position.
8. Total deposit trend of NABIL shows that there is a lower rate of growth in total deposit of NABIL, which couldn't be healthier for the bank. So, it is suggested to NABIL to increase deposit collection at higher rate.
9. NIBL \& HBL are not earning interest at the same growth rate at which they have made their investment. These two banks are earning interest at lower growth rate in comparison to their investment. So, these banks are suggested to review their investment policy and suggested to adopt such policy in which they can earn maximum interest.

[^0]:    Source: Annual Reports of NIBL

[^1]:    $\underset{(\text { Excluding Current Deposit) }}{\text { Loans \& Advances to Total Deposit }=}=\frac{\text { Total Loans and Advances }}{\text { Total Deposit (Excluding Current Deposit) }} \times 100$

[^2]:    Source: Annual Reports of NABIL, NIBL \& HBL

