

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Nepal has agriculture-dominated economics where most of the populations are engaged in farming. As more Nepal is a country which whole activities of the most rural areas are non-mechanized its mainstream of economy. Therefore, it is obvious that contribution of this sector in national economy is huge. Nevertheless, in recent years non-agriculture sector is significantly contributing in national economy. Due to political insurgency manufacturing sector is not growing as expected but service sector is growing rapidly within service sector banking industry is growing in high rate than it was anticipated. Banking sector is the most dynamic part of economy, which collects unused funds and mobilizes it in needed areas. It is the heart trade commerce industry. In Nepalese context commercial banks have comparatively good performance among the public limited companies? The nature of bank fund and its payment depends upon day-to-day operation. Therefore, its operation of fund raising and investments of funds are of short-term nature. As long term, investments are associated with higher risk. Banks are confined to make short-term investments only. R W Goldsmith suggests that significance of commercial banks is greater in countries of comparatively lower level of economic development. The shares of commercial banks in the net issues of all financial institution are much higher in such countries in the ones with higher stage of economic development. There are different types of securities as treasury bills, long term government bonds long term corporate bonds, common stocks etc. among these securities this study concerns with common stocks. Common stocks represent a commitment on the part of a corporation to pay periodically whatever its board of directors deems appropriate as a cash dividend.

In present global scenarios, Joint venture are mode of trading through partnership among nations and also sort of negotiations between groups of industries and traders to achieve mutual exchange of goods and services for sharing comparative advantages. Nepal is a member of WTO and agreed for global partnership for the financial activities. This incorporates accessibility of multinational

companies and others financial institutions in its home land. In this regards, creation of portfolio is one instrumental tool to enhance strength of financial institutions.

Investment in two and more than two assets is normally called portfolio. A portfolio is a combination of investment assets. Portfolio is holding securities and investment in financial assets like bond, stock. Portfolio means the risk of holding in securities owned by an investor or institution. (Oxford dictionary of financial and banking new edition 1997) a portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called portfolio. Portfolio theory deals with the selection of optimum portfolios; that is portfolio that provides the highest possible return for any specified degree of risk or the lowest possible risk for any specified rate of return. (Weston and Copeland, 1992) According to Weston & Brigham, “A portfolio simply represents the practice among the investors of having their funds in more than one asset. The combination of investment assets is called a portfolio.” (Weston & Brigham, 1982:245).According to Raymond Brockington, “The term ‘portfolio’ simply means collection of investments. For an investor through the stock exchange the portfolio will be a collection of shareholding in different companies. For a property, investor has portfolio will be a collection of buildings. To a financial manager within an industrial company has portfolio will be a collection of a real capital projects. It will be apparent that the actual of the components of a portfolio depends on the population of opportunities from which the selection has been made” (Relly and Brown; 2004:148)

Overall national development of any country depends upon the economic development of that country and economic development largely depends upon the financial infrastructure of that country. Therefore, the primary goal of any nation including Nepal is rapid economic development to promote the welfare of the people and the nation as well. Nepal being one of the least developed countries has been trying to embark upon the path of economic development by economic growth rate and developing all sectors of economy.

The proper mobilization and utilization of domestic resources is one of the key factors in the economic development of a country. Similarly, integrated and speedy development of the country is only possible when competitive and reliable banking services are reached and operated to every corner of the country. It has been well

established that the economic activities of any country can hardly be carried without the assistance and support of financial institutions. Financial institutions have catalytic role in the process of economic development. The investment policy of financial institutions, especially banks has long term impact not only on their growth and sustainability but also on the economic development of the country. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of banks and other financial institutions. Good investment policy has a positive impact on economic development of the country and vice-versa.

The initial step an investing policy involves is determining the investment objectives and the amount of one's investable fund. Investment is always related with risks and returns. Making money alone cannot be an appropriate objective. It is appropriate to state that the objective is to make a lot of money by recognizing the possible losses. Therefore, investment objective should be stated in terms of both risks and returns. Setting a clear investment policy also involves the identification of the potential categories of financial assets for consideration in the ultimate portfolio. The identification of assets depends upon many things, such as investment objectives, investable fund, tax consideration etc. (Bhattarai Rabindra, 2004; 3)

Investment is a very risky job for a purposeful, safe and profitable investment. Bank must follow sound investment policy. The fundamental principle of investment must be followed thoroughly for profitable investment. Investment policy should ensure maximum amount of investment to all sectors with proper utilization. There is high liquidity in the market and it seems no profitable place to invest these days. Investment policy provides the bank several inputs through which they can handle their investment operation efficiently ensuring the maximum return with minimum risk, which ultimately leads the bank to the path of success to achieve its organizational objectives of shareholders' wealth maximization.

1.1. a) Evolution of Bank

The evolution of bank is not a non-phenomenon. There was crude form of banking even in an ancient Vedic era. The terms banking such as deposits, pledge, policy of loan, interest rates etc can be found in the "Manusmiriti."

The Roman Empire collapses in the last of 15th century and consequently, commercial banking transactions were started because of revival of commercial and other trading activities in European countries. According to the opinion of great economist Geoffrey Crowther, following community groups are the ancestors of modern banking:

- The Merchant Trader
- The Goldsmith
- The Money Lenders

History tells us that it was the merchant banker who first evolved the system of banking by trading in commodities then money. Their trading activities required the remittance of money from one place to another for which they issued different documents as the near substitutes of money, called draft or hundis in modern days.

The next stage in the growth of banking was the goldsmiths; the business of goldsmiths was such that they had to take deposits such as bullion, money and ornaments for the security from theft. This makes possible to the goldsmiths to charge something for taking care of the money, bullion and jewelry. On the other hand, as the evidence of receiving valuables, they used to issue a receipt to the depositors. As those receipts are good for payment equipment to The amount mentioned, it become like the modern Cheques, as a medium of exchange and a means of payments.

Finally, moneylenders in the early age had contributed in the growth of banking to a lager extent. They used to advance the coins on loan by charging interest. As a safe guard they used to keep some money in the reserve. Therefore goldsmiths and moneylenders became bankers who started performing the two functions of bank i.e. accepting deposit and providing loans and advances. “The bank of Venice” of Italy was established in 1157 A.D. as the first banking institution in the world. The second banking institution namely “The bank of Barcelona” of Spain was established in 1401 A.D. Its function is to exchange money, receive deposits and discount bill of exchange, both for their own citizens and for the foreigner. During 1407 A.D. “The Bank of Genon” was established in 1609 A.D. “The Bank of England” was incorporated in 1694 A.D. as a joint stock bank and later on the 1844 A..D. it becomes a first central bank in the world.

1.1 b) Commercial Banks and Investment Policy

Commercial Bank is an entity which accepts deposits and makes short term loans to business enterprises, regardless of the scope of its other services. (American Institution of Banking, 1972; 345-346)

Commercial banks are major financial institutions, which occupy quite an important place in the framework of every economy. Commercial banks render numerous services to their customer in view of facilitating their economic and social life. All the economic activities of each and every country are greatly influenced by the commercial banking business of that country. Commercial banks, by playing active roles, have changed the economic structure of the world. Thus, commercial banks have become the heart of financial system.

Commercial bank deals with people's money. They have to find ways of keeping their assets liquid so that they could meet the demand of their customers. In their anxiety to make profit, the banks can't afford to lock up their funds in assets that are not easily realizable. The depositor's confidence could be secured only if the bank is able to meet the demand for cash promptly and fully. The banker has to keep adequate cash for this purpose. Cash is an idle asset and hence the banker cannot afford to keep a large portion of his assets in the bank. Therefore the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity.

Commercial banks must mobilize its deposits and other funds to profitable, secured, stable and marketable sector. Then only it can earn more profit as well as it should be secured and can be converted into cash whenever needed. But, commercial banks have to pay due consideration while formulating investment policy regarding loan and investment. Investment policy is one facet of the overall spectrum of policies that guide bank's investment operations. A healthy development of any bank depends heavily upon its investment policy. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volume and quality of deposits, loan and investment. Commercial bank should be careful while performing the credit creation function. The banks should never invest its funds in those securities, which are subject to too much depreciation and fluctuations because a little difference may

cause a great loss. It must not invest its funds into speculative businessman who may be bankrupt at once and who may earn millions in a minute. Emphasizing upon this, H.D. Crosse stated, “The investment policy should be carefully analyzed.”(Crosse H.D., 963) So they must invest their funds where they gain maximum profit.

Commercial banks must follow the rules and regulations as well as different directions issued by the central bank, ministry of finance, ministry of law and other regulatory bodies while mobilizing its funds. So, the bank should invest its funds in legal securities only. Diana McNaughton in her research paper ‘Banking Institutions in Developing Markets’ states that, investment policy should incorporate several elements such as regulatory environment, the availability of funds, the selection of risk, loan portfolio balance and term structure of the liabilities. (McNaughton, Diana, 1994, 243-245). Thus, commercial banks should incorporate several elements while making investment policy. The loan provided by commercial bank is guided by several principles such as length of time, their purpose, profitability, safety etc. These fundamental principles of commercial bank’s investment are fully considered while making investment decisions.

The investment activities of the Nepalese banks can be very limitedly classified, as there have been limited financial instruments. The banks have been predominantly investing in the government securities like the treasury bills and government bonds.

This investment in government securities is for the liquidity benefit it offers. The other Areas of investment include inter-bank placement and investment in shares and Debentures. The total investment has increased by 8.99 percent on Mid July 2008 in the banking Industry as compared to previous year. The total volume of the investment as on mid July 2008 was Rs.104.84 billion. The analysis of the composition of the investment of the public banks indicates a heavy concentration of 75 percent in the form of Government bonds while the private sector banks shows only 61 percent in such bonds. Similarly, investment on shares & debentures is 2 percent in both and on other instruments is 23percent and 37 percent respectively and public and private banks. Banks are not allowed to invest in the shares and debentures of the Banks and the Financial Institutions but still their investment exists in this regard.

1.1. c) Investment Pattern of Nepalese Commercial Banks

The development of banking sector in Nepal is relatively recent. The establishment of “Tejarath Adda” during the year 1877 A.D. was the first step in institutional development of banking sector in Nepal. Tejarath Adda did not collect deposit from public but granted loans to public against the collateral of bullions. Consequently the major parts of the country remain untouched from these limited-banking activities. The development of trade with India and other countries increase the necessity of the institutional banker, which can act more widely to enhance the trade and commerce and to touch the remote non-banking sector in the economy.

Considering this situation, the “Udyog Parishad” was constituted in 1936 A.D. One year after its establishment, it formulated the “Company Act” and “Nepal Bank Act” in 1937 A.D. Nepal Bank limited was established under Nepal Bank Act in 1937 A.D. as a first commercial bank of Nepal with authorized capital of Rs. 10 million.

Modern banking practices emerged with the establishment of Nepal Bank Limited in 1934 A.D. However the stand of Nepal Bank limited alone in total monetary and financial sector was not sufficient and satisfactory. Thus Nepal Rastra Bank was set up on 1956 A.D.(2013.01.14) as a Central Bank under Nepal Rastra Bank Act 1956 A.D. (2012 B.S.). Similarly, on 1966 A.D. (2022.10.10) Rastriya Banijaya Bank (RBB) was established as a fully government owned commercial bank. With the emergence of RBB, banking service spread to both the urban and rural areas but customers failed to have taste of quality and competitive service because of excessive political and bureaucratic interference. For industrial development, Industrial Development Center was set up in 1956 A.D. (2013 B.S.) which was converted to Nepal Industrial Development Corporation (NIDC) in 1959 A.D. (2016 B.S.). Similarly, Agriculture Development Bank (ADB/N) was established in 1976 AD (2024.10.07) with an objective to provide agricultural products so that agricultural productivity could be enhanced through introduction of modern agricultural techniques. As the country moved towards economic liberalization in 1980 A.D., foreign Banks were invited to operate in Nepal. The financial scenario has changed with the introduction of joint venture banks in 1984. The number of commercial banks has been increasing. Since then, various financial institution like, Joint Venture Banks, Domestic Commercial Banks, Development Banks, Finance

Companies, Micro Finance Companies, Credit Guarantee Corporation, Employee Provident Funds, Citizen Investment Trust, National Insurance Corporation, Nepal stock Exchange have come into existence to cater the financial needs of the country thereby assisting financial development of the country.

In 1990 A.D. after the restoration of democracy in Nepal, the government highlights the agenda of economic liberalization and emphasized to invite foreign direct investment (FDI) in the banking sector of Nepal. Therefore the development of Commercial Banks in Nepal is categorized in three phases on the basis of financial institutions policies adopted by the country from time to time. They are:

- Commercial Banks prior to 1980's
- Commercial Banks of 1980's
- Commercial Banks post 1990's

There were only two banks prior to 1980's they are NBL and RBB. All the three Commercial Banks of 1980's were established as joint venture banks. Similarly six commercial banks of past 1990's were also come into operation as joint venture banks. Latest six banks including Nepal Industrial and Commercial Bank Ltd, Lumbini Bank Ltd, Machapuchhre Bank Ltd, Kumari Bank Ltd, Laxmi Bank Ltd, Siddharth Bank Ltd were established by the private sector entrepreneurs of Nepal. Some of the joint venture banks have changed their name after the foreign investors disinvest their stake to Nepali entrepreneurs. Nepal Arab Bank Ltd. is now known as Nabil Bank Ltd., similarly Nepal Grind lays Bank Ltd, Nepal Indosuez Bank Ltd, and Nepal Bank of Ceylon Ltd, are now known as Standard

Chartered Bank Nepal Ltd, Nepal Investment Bank Ltd, Nepal Credit and Commerce Bank Ltd. respectively.

Taking an overview of financial institutions providing banking facility in Nepal, there are 28 Commercial Banks, 73 Development Banks, 17 Micro- Credit Development Banks, 78 Finance Companies, 17 saving and Credit Co- operatives (licensed by NRB).

Table No. – 1.1
List of Licensed commercial Banks in Nepal

S.N.	Names	Operation Date (A.D.)	Head Office	Paid up Capital (Rs in Million)
1	Nepal Bank Limited	1937/11/15	Kathmandu	380.4
2	Rastriya Banijya Bank	1966/01/23	Kathmandu	1172.30
3	Agriculture Development Bank Ltd.	1968/01/02	Kathmandu	10777.50
4	Nabil Bank Limited	1984/07/16	Kathmandu	14491.00
5	Nepal Investment Bank Limited	1986/02/27	Kathmandu	2407.10
6	Standard Chartered Bank Nepal Limited.	1987/01/30	Kathmandu	1398.50
7	Himalayan Bank Limited	1993/01/18	Kathmandu	1600.00
8	Nepal SBI Bank Limited	1993/07/07	Kathmandu	874.50
9	Nepal Bangladesh Bank Limited	5/6/1994	Kathmandu	1860.30
10	Everest Bank Limited	1994/10/18	Kathmandu	8305.00
11	Bank of Kathmandu Limited	1995/03/12	Kathmandu	11822.00
12	Nepal Credit and Commerce Bank Limited	1996/10/14	Siddharthanagar, Rupendehi	1399.60
13	Lumbini Bank Limited	1998/07/17	Narayangadh, Chitawan	1288.00
14	Nepal Industrial & Commercial Bank Limited	1998/07/21	Biaratnagar, Morang	1391.80
15	Machhapuchhre Bank Limited	2000/10/03	Pokhara, Kaski	1700.00
16	Kumari Bank Limited	2001/04/03	Kathmandu	1304.90
17	Laxmi Bank Limited	2002/04/03	Birgunj, Parsa	1533.70
18	Siddhartha Bank Limited	2002/12/24	Kathmandu	1230.00
19	Global Bank Ltd.	2007/01/02	Birgunj, Parsa	1325.10
20	Citizens Bank International Ltd.	2007/6/21	Kathmandu	1159.10
21	Prime Commercial Bank Ltd	2007/9/24	Kathmandu	1163.80
22	Sunrise Bank Ltd.	2007/10/12	Kathmandu	1419.40
23	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu	1053.20
24	Development Credit Bank Ltd.	,2008/5/25	Kamaladi, Kathmandu	1655.3
25	NMB Bank Ltd.	,2008/6/5	Babarmahal, Kathmandu	1430.00
26	Kist Bank Ltd.	2008/02/21	Anamnagar, Kathmandu	2000.0
27	Janata Bank Ltd	2010/04/05	New Baneshwor, Kathmandu	5000.0
28	Mega Bank Ltd.	2010/07/23	Kantipath, Kathmandu	4000.0

Source: By Net, Banking Financial Statistics and NRB

After the announcement of liberal and free market economic based policy, Nepalese banks and financial sectors are having greater network and access to national and international markets. They have to go with their portfolio management very efficiently and seriously for coping with various challenge in order to increase their regular basis of income as well as to enrich the quality base of service for the attraction of good clients. In this competitive and market oriented open economy, each and every commercial bank and financial institution has to play a determining role by widening various opportunities for the sake of expanding provisions of best service to their customers and by making themselves as a strong and potential financial intermediaries as per country's need of present scenario to obtain the desired level of economic development.

Joint venture banks are the mode of trading to achieve mutual exchange of goods and services for sharing competitive advantage by performing joint investment scheme between Nepalese investors, financial and non financial institutions as well as private investors and their parent banks each supplying 50 percent of total investment. The parent banks, which have experiences in highly mechanized and efficient modern banking services in many parts of the world have come to Nepal with higher technology, advance management skills. Joint venture banks are established by joining different forces and with ability to achieve a common goal of each of the partners. They are more efficient and effective monetary institution in modern banking fields than other old type of banks in Nepalese context (Thapa Samiksha, 2001; 6)

In Nepal, Commercial banks play a vital role in the economic growth. Its investments range from small-scale cottage industries to all types of social and commercial loans and large industries. Generally the investment of the Commercial Banks include the investment on Government securities like Treasury bills, development bonds, national savings bonds, foreign government securities, shares of government owned companies and non- government companies and investment on debentures. Similarly the Commercial Banks use their major chunk of funds in loan and advances.

1.1. d) Profile of Sample Banks

In this section general introduction of the banks under study is being attempted to furnish for the easy reference of the samples to the research.

A. Nabil Bank Ltd.

Nabil Bank Limited, the foreign venture bank of Nepal, started its operation in 12 July 1984. Nabil was incorporated with the objective of extending international standard modern banking services to various sectors of the society. Dubai bank Ltd. Was the first joint venture foreign partner of Nabil bank, currently NB (international) Ltd., Ireland is the foreign partner of Nabil bank. Nabil Bank limited had the official name Nepal Arab Bank Limited till 31 December 2001. Nabil provides a full range of commercial banking services through its 19 points of representation across the kingdom and over 170 reputed correspondent banks across the globe. Nabil, as a pioneer in introducing many innovative products and marketing concepts in the domestic banking sector, represents a milestone in the banking history of Nepal as it started an era of modern banking with customer satisfaction measured as a focal objective while doing business. National Bank Ltd. Bangladesh is managing the bank in accordance with the technical services agreement signed between it (Nabil) and the bank on June 1995.

The present configuration consist of 50% share capital of National Bank limited, 10% of Nepal Industrial Development Corporation, 9.67% of Rastriya Bema Sansthan, 0.33% of Nepal stock exchange and 30% of Nepalese public. At present 17 branches of the bank are operating in different parts of the country. Authorized capital and paid up capital of Nabil bank limited are Rs.500 million and Rs. 491.6544 million.

The following Activities and services are provides by Nabil including normal functions;

- Tele Banking
- Credit card facilities
- SWIFT

- Deposit Locker
- Western Union money Transfer
- ATM
- International Trade and Bank Guarantee.

This Bank is awarded by “Bank of year 2004”.

The bank firmly believes that technology is always central to business and in today’s context it leaves catalytic effects in a world wherein we live connected in a network. Nabil Bank is steps ahead to proactively cash in on the application of appropriate technologies to make the most of the opportunities lying before it. The technology, FINACLE the bank has been availing itself is a prototype of the one with the updates indispensable for today for connectivity. The bank has an efficient and resourceful IT team to run the IT department for its 28 points of representations, 32 ATMs and hundreds of Post terminals all the time. The Bank values relationship and engenders a sense of belongingness as a family maintaining a perfect harmony and coordination across all levels and hierarchies. It opens culture wherein all work together tied up with a common bond. All, both the management and staff work in harmonious association for a noble cause and of course with the common goal of becoming the bank of 1st Choice.

Nabil has been the pioneer in increasing acceptance of cards as payment means in the country. For a single Bank in Nepal, Nabil has one of the largest networks of 31 ATMs and more than 1100 POS terminals at locations spreading across the country from Birtamode to Mahendranagar that accepts range of card brands like Mastercard, Visa, Maestro, Cirrus, Visa Electron, Visa Plus and SCT cards. Nabil also provides service of online payments through its Card Division and selected branches enabling customers to make payments like test registrations, membership fees, purchase of books, journals etc. The arrival of Nabil Bank in Nepal on the 12th of July 1984 through a joint venture with Dubai Bank Ltd. under a Technical Service Agreement (TSA), marks a new dawn in the Nepalese banking industry. What is more admirable is with the opening of then Nepal Arab Bank Ltd, Customer Service or marketing took a U-turn. That in substance accelerated the

evolution in banking products and services thereafter in Nepal. The bank commenced with a team of about 50 staff members and Rs. 28 million as capital.

Today Nabil has proved that it has through its past progressions and through different phases in the banking industry achieved two things we can take pride in: first it has a large clientele base and supportive stakeholders, secondly, it has succeeded in positioning itself robustly in the market for which the credit goes to Team Nabil. Today the Bank has established itself as the Bank of 1st Choice. It is the largest bank in terms of the network and number of branches amongst the commercial banks with a wide network of ATMs and offerings including a range of diversified service products. It has a number of domains in precedence of excellence that mirrors where it stand in the market. In this span of 24 years of banking operation Nabil has already distributed rich cash dividends, spectacular returns on asset and equity even during the most trying times. All of which endorses the strength and drive with which Nabil proceeds. In order to make our presence felt in every walk of life and serve people across all social strata and segments, have expanded our network by adding 9 more branches that totals to 28 points of representation in the nation. It has diversified its realms of business in the interests of our customers and are also being inspired by the noble cause of adding value to economic development. It has multiple sectors in focus to serve host of entrepreneurs as its new strategies are to expand dynamically, exploring new avenues and opportunities. It thus has packaged our service products into well a diversified range consisting of corporate banking, trade finance, along with consumer and retail banking services specifically, card products, microfinance and the like to reach out to the masses.

It has been able to reach where we are today having lived its values of being C.R.I.S.P at all times.

B. Nepal Investment Bank

Nepal Investment Bank Ltd. (Nepal Indosuez Bank Ltd) was established on 21STjanuary 1986 as a third joint venture bank under the company Act 1964. Initially, the Bank is manages by Banque Indosuez, Paris in accordance with joint venture and technical services. 50% of the shares of Nepal Investment bank ltd held by credit Agricole Indosuez was sold to the Nepalese promoters on April 25, 2002 as per the

transaction record of NEPSE. After this divestment of shares by Nepalese Owners, the name of the company was changed to Nepal Investment Bank Ltd. By its 15th AGM held on May 31, 2002

Out of total equity shares of Nepal Investment Bank Ltd. 50% shares are held by a group of companies, 15% by commercial banks another 15% by financial institutions and remaining 20% by general public. Authorized capital of NIBL is Rs.100 million and issued and paid up capital is Rs.801.3526 million.

The following Activities and services are provided by NIBL including normal functions;

- Tele Banking
- Credit card facilities
- SWIFT
- Deposit Locker
- NTC's Mobile bill payment
- ATM
- International Trade and Bank Guarantee.

This bank is awarded by “Bank of year 2003, 2005 and 2008”.

With the decision of Credit Agricole Indosuez to divest, a group of companies comprising of bankers, professionals, industrialists and businessmen, had acquired on April 2002 the 50% shareholding of Credit Agricole Indosuez in Nepal Indosuez Bank Ltd.

The name of the bank has been changed to Nepal Investment Bank Ltd. upon approval of bank's Annual General Meeting, Nepal Rastra Bank and Company Registrar's office with the following shareholding structure.

- A group of companies holding 50% of the capital
- Rashtriya Banijya Bank holding 15% of the Capital.
- Rashtriya Beema Sansthan holding the same percentage.

- The remaining 20% being held by the General Public (which means that NIBL is a Company listed on the Nepal Stock Exchange).
- It believes that NIBL, which is managed by a team of experienced bankers and professionals having proven track record, can offer you what you're looking for. It can sure that your choice of a bank will be guided among other things by its reliability and professionalism.

Board of Directors

Mr. Prithivi Bahadur Pande	Chairman & CED	Group A
Mr. Prajanaya Rajbhandari	Director	Group A
Mr. Deepak Man Sherchan	Director	Group A
Mr. Janardan Dev Pant	Director	Group A
Mr. Krishna Prasad Sharma	Director	Rastriya Banijya Bank - Group B
Mr. Binod Aryal	Director	Rastriya Beema Sansthan - Group C
Mr. Surendra Bahadur Singh	Public Director	Group D
Mr. Damodar Prasad Sharma Pandey	Professional Director	

1.2 Statement of Problem

Mushrooming of private sector banks is the present situation of Nepalese financial sector. The fast growth of such organization has contributed the pro-rata increment in collecting deposits and their investment. They collect adequate amount from the mass, however they could not find or locate new investment sectors required to mobilize their funds on the changing context of Nepal. Only few commercial banks are getting regular profits. Most of them are unable to satisfy their shareholders and customers in earning profit and ensuring their safe deposit. Some banks are incurring losses in early establishment years. It is not that they do not have potential clients or adequate deposits but they cannot find profitable sectors or opportunities to invest the deposit collections. They have always feared with high degree of risk and uncertainty.

There are various problems in resources mobilization by financial institution in Nepal. The most important problem is poor investment climate prevailing in Nepal due to heavy regulatory procedure, uncertain government policy, NRB's stringent directives, unsecured social environment etc. Lack of sound investment policy is another reason for a commercial bank not to properly utilizing its deposits that is making loan and advances or lending for a profitable project. This condition may lead the commercial bank to the position of liquidation.

Commercial banks invest their funds in limited areas to achieve highest amount of profit. They are found to more interest in investment in less risky and highly liquid sectors like in T-Bills, development bonds and retail and consumer lending. There is an obvious hesitation to invest on long-term projects and in venture capital investment. So, many of them follow conservative and un-effective investment policy.

As with everything in Nepal, every commercial bank has an investment in the same sectors. They are in consumer lending, tourism, garments and in trading sector. They are the major sectors. But given the current situation of the country, it is not up to them to decide which sector they want to go into. The main factor for success of any organization is the security situation. Once the security situation stabilizes, then only commercial banks consider rationally as to where they should to invest and grow. So, security problem is the burning problem for every commercial bank to invest their funds in our any sectors.

Many of Nepalese commercial banks have not formulated their investment policy in an organized manner. Majority of them mainly rely upon the instruction and guidelines of Nepal Rastra Bank. They don't have clear view towards investment policy. Furthermore, the implementation of policy is not in an effective way. Lack of farsightedness in policy formulation and absence of strong commitment towards its proper implementation has caused many problems to commercial banks.

The problems specially related to investment functions of the commercial banks have been presented briefly as under.

- a) Is Nabil Bank's investment policy more effective and efficient than that of NIBL?
- b) Is Nabil Bank's investment strategy successful to utilize its available fund in comparison to the NIBL?
- c) Are they maintaining sufficient liquidity, profitability and risk position?
- d) What is the relationship of investment on loan and advances with total deposits and total net profit?
- e) Does the investment decision affect the total earnings of the commercial bank?

1.3 Objective of the Study

The broad objective of the study is to analyze the investment policy of commercial banks. But the specific objectives are:

1. To examine the investment policy of banks.
2. To examine the utilization of available fund of Nabil Bank and NIBL.
3. To evaluate the liquidity, profitability and risk position of Nabil Bank and NIBL.
4. To find out the empirical relationship between deposits, loan and advances, investment, net profit and compare them between Nabil & NIBL.
5. To provide necessary suggestion and recommendation for improving the investment policy of Nabil & NIBL on the basis of the findings of the analysis.

1.4 Focus & Significance of the Study

The main focus of the study is to highlight the investment policies of commercial banks expecting that the study can be bridge the gap between deposits and investment policies. On the other hand, the study would provide information to management of the bank that would help them to take collective action. Further from the study, the shareholders would get information to make decision while making investment on shares of various banks.

In the context of Nepal there is less availability of research work, Journal and Articles in investment policy of commercial banks as well as other financial institution. As it is a well known fact that the success and prosperity of the bank relies

heavily upon the successful investment of collected resource to the important sectors of economy. Successful formulation and effective implementation of investment policy is the prime requisite for the successful performance of commercial banks.

There are various problems in effective investment of commercial banks of Nepal, which affect their performance to a greater extent. Performance of commercial banks does not seem so satisfactory in terms of utilizing its resource efficiently in productive sectors. Hence the main significance of this study of investment portfolio analysis of Nepalese commercial banks is to help how to minimize risk on investment and maximize return through portfolio analysis. Similarly, the study of commercial banks investment trend, risk return pattern, portfolio management, credit management and effect on investment decision on earning will strive to disclose the internal weakness of the banks and furnish the ideas for improvement. Therefore, the researcher has undertaken this study to analyze the existing investment portfolio of Nepalese commercial banks with reference to Nabil & NIBL and point out the various weaknesses of defects inherent in it and provide package of suggestions for its improvement.

1.5 Limitations of the Study

Limitations of the study are as follows:

- a. The study is mainly based on secondary data collected from different sources.
- b. The study period will be cover only five fiscal year, i.e. from 2004/2005 to 2008/2009.
- c. Only few simple technique like average have been used for the analysis of the data.

1.6 Organization of the Study

The whole study has been divided into six chapters. First is introduction chapter, which includes general background, statement of the problem, focus & signification of the study, objectives of the study and limitations of the study and chapter plan.

Second chapter deals with the review of available literatures in the field of the study being conducted. This includes review of the theories of the concerned topic, review of supportive text, review of books, review of bulletins and annual reports published by bank, review of related articles and review of previous thesis.

Third chapter explains the research methodology employed to conduct the study and tools and techniques used in analysis of the data as well. This chapter includes, research design, sources of data, population and samples, method of data analysis, various financial and statistical tools.

Fourth chapter is devoted to the presentation and analysis of data through definite course of research methodology. The main working of this chapter is to analyze different financial ratios related to the investment and fund mobilization of Nabil in comparison to the NIBL. Major findings of the study are also included in this chapter.

Fifth is the last chapter of the study, which provides summary and conclusion, suggestions and recommendations for improving the future performance of the sample banks.

Besides these, bibliography and appendices will also present at the end of the thesis. Similarly, acknowledgements, table of contents, list of tables, list of figures, abbreviations are included in the front part of the thesis report.

CHAPTER-II

REVIEW OF LITERATURE

This chapter deals with the theoretical aspect of the topic on investment policy in more detail and descriptive manner. It provides the foundation for developing a comprehensive theoretical framework and knowledge of the status relevant to the field of research in order to explore the relevant and true facts for the reporting purpose. Hence, in this chapter, the focus has been made on the review of literature relevant to the investment policy of commercial banks. For this study, different books, journals, articles, annual reports and some research paper related with this topic has been reviewed. Therefore, this chapter is arranged in the following order:

- Review of Supportive Text
- Review of Previous Study
- Review of Articles
- Review of Research Papers
- Review of Thesis
- Review of Legislative Provisions

2.1 Review of Supportive Text

Review of supportive text provides the fundamental theoretical framework and foundation to the present study. For this, various books, research paper, articles etc. dealing with theoretical aspects of investment policy analysis are taken into consideration.

2.1. a) Definition of Investment

Investment is nothing but deploying our savings in a manner that ensures safety of our money and provides a sustained return to supplement our regular income. (Delhi Stock Exchange, January 2002). The term investment covers a wide range of activities. It is commonly known fact that an investment is only possible where there are adequate savings. If all the incomes and savings are consumed to

solve the problem of hand to mouth and to the other basic needs, then there is no existence of investment. Therefore, both savings and investment are interrelated.

Investments are made in assets. Assets in all are of two types, real assets (land, buildings, factories etc) and financial assets (stocks, bond, T-bill etc.). These two investments are not competitive but complementary. Highly –developed institutions for financial investment greatly facilitate real investment. (Bhattarai Rabindra, 2004; 3)

Mrs. Preeti Singh has defined investment in this way; investment is the employment of funds with the aim of achieving additional income or growth in value (Singh, 1992; 1)

In the words of Gitman and Joehank, investment is any vehicle into which funds can be placed with the expectation that will preserve or increase in value and generate positive returns. (Gitman and Joehank, 1990; 1)

Charles P. Jones has defined that, investment as the commitment of funds to one or more assets that will be held over some future time period. Investment is concerned with the management of an investor’s wealth, which is the sum of current income and present value of all income. (Charles, 1991; 2)

2.1. b) Features of Sound Lending and Investing Policy

Some of the main characteristics of sound lending and investment policies which most of the banks must consider have been given by many authors are as under:

I) Safety and Security

While selecting the sectors for investing the funds, a bank should be very much conscious. It should never invest its funds in those securities, which are too volatile because a little difference may cause a great loss. Similarly, the businessman who is bankrupt at once or earns a million in a minute should not be financed at all. The banks invest its funds in legal securities only. The bank should accept that type of securities, which have marketability; ascertain ability, stability & transferability and it

also accept those securities, which are commercial, durable and high market prices. For the safety and security in investing funds the bank can use the investment portfolio tools also.

II) Liquidity

Liquidity generally refers to the cash or any assets that can be converted into cash immediately. Generally, people deposit money at the bank in different account with confidence that the bank will repay their money whenever it is needed. In order to maintain the confidence to the depositors, the bank must always be ready to meet current or short-term obligations when they become due for repayment. Liquidity is the capacity of bank to pay cash against deposits. Hence the liquidity position of a bank is such an important factor.

III) Profitability

Commercial banks invest on those sectors from where more and more return can flow because through maximizing the returns on its investment, bank can maximize its volume of wealth. Hence the investment or granting of loan & advances by them are highly influenced by the profit margin. Generally, the profit of commercial bank depends upon the interest rate of the bank, volume of loan provided, time period of loan and nature of investment on different securities. Profitability is only the term, which always motivates commercial banks to invest their money more and more.

IV) Suitability

A banker should always know why a customer is in need of loan. If a borrower misuses the loan granted by the bank, he will never be able to repay the loan and bank will possess heavy bad debts. Therefore, in order to avoid such circumstances, advances should be allowed to select suitable borrowers and it should demand all the essential detailed information about the scheme of the project. Bank should also keep in mind the overall development plans of the nation and the credit policy guidelines of the central bank.

V) Diversification

The bank should be careful that while granting loan, it should not be always in one sector. To minimize risk and maximize the profit, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the law of average because if securities of a company depreciated, there may be appreciation in the securities of other companies. In this way, the loss can be recovered.

2.1. c) Sources of Funds for the Investment

There are different sources of funds for the investment of the bank.

a) Capital

Capital is the lifeblood of the trade and commerce. Therefore, capital is needed for the operation of the bank as in other business. The capital fund consist of two elements like

- i) Issuing Shares
- ii) General Reserves
- iii) Issuing Shares

Bank issues its share for the collections of capital. So this is one of the sources of fund to invest. By increasing in the issue of share, the bank can increase its capital.

- i) General Reserves

Reserves are kept by the bank separated from the profit. This reserve is also invested at the time of contingency and to cover the loss in future.

b) Accumulated profit

If the capital is not sufficient and there is need of more money to invest in that case the bank uses the accumulated profit to invest. In the time of contingency also, the bank invests its accumulated profit for recovering its future loss.

c) Deposits

Deposits are the main source of funds. By providing certain rate of interest, commercial bank calls for the deposit from the customer. Mainly, three types of deposits are accepted by the bank like current deposit, fixed deposit, saving deposits. These different types of deposits are used for lending the money to different sectors like agriculture, production, trade, service sector and other industry. The deposits will lead to increase in the working capital of the bank.

d) External and Internal Borrowings

The funds can be collected by borrowing money through different banks or different institution. In a developing country like Nepal, those types of borrowings are very important. The commercial banks may not have sufficient fund to invest in different sector. In that case it has to borrow from other bank or other financial institutions. Generally the commercial bank borrows from two sources i.e. external and internal. Generally external borrowing means the borrowing from foreign banks, and foreign government. Internally, the commercial banks borrow mainly from inter bank and Nepal Rastra Bank. So the commercial bank cannot provide loan or investment without the funds. From the fund collected from above different source, the commercial bank grants loan.

2.2 Review of Previous Study

Every scientific research is based on past knowledge. The previous studies cannot be ignored because they provided the foundation to the preset study. Therefore, in the light of this dissertation in this section review of articles, review of research papers & review of thesis of previous study are taken into consideration.

2.2. a) Review of Articles

Under this heading, efforts have been made to examine and review some of the related articles published in different economic journals, bulletin of World Bank, dissertation papers, magazines, newspapers and other related books.

F. Morris, in his discussion paper on “Latin America’s banking system in the 1980’s”, has concluded that most of the banks concentrated on compliance with central bank rules on reserve requirements, credit allocation (investment decision) and interest rates. While analyzing loan portfolio quality, operating efficiency and soundness of bank investment management has largely been overlooked.

He further adds that mismanagement in financial institutions has involved inadequate and overoptimistic loan appraisal, high risk diversification of loan portfolio and investments, high risk concentration, related parties lending, etc, are major cause of investment and loan that has gone bad (Morris, 1990;pp81)

Sunity Shrestha in her article, “Lending operation of commercial Banks of Nepal and its impact on GDP” has presented with the objectives to make an analysis of contribution of commercial banks’ lending to the gross domestic product (GDP) of Nepal. She has set hypothesis that there has been positive impact of lending of commercial banks to the GDP. In research methodology, she has considered GDP as the dependent variable and various sectors of lending viz. agriculture, industrial, commercial service and general multiple regression technique has been applied to analyze the contribution.

The multiple analyses have shown that all the variables except service sector lending have positive impact on GDP. Thus, in conclusion she has accepted the hypothesis that there has been positive impact by the lending of commercial banks in various sectors of economy, except service sector investment. (Dr. Sherestha, 2055; 23-27).

Shree Prasad Poudel, Deputy Director, NRB in his article “Government Security Markets Rational and Development in Nepal” has concluded that the Security markets are center of the financial system. Debt securities market in the Nepal is highly dominated by government debt securities. Debt statistics evidenced that Nepal remained debt free nation till 1950’s. From the beginning of 1960’s foreign loans and domestic bonds have been alternative means of debt financing in Nepal as a result total debt as a percentage of GDP widened from 1% in 1960’s to 65.3% in the year 2000.

According to Mr.Poudel, Government debt consists of Treasury bills (T-Bills), National Savings Certificates (NSCs), Development Bonds (DBs), Special Bonds (SBs), and Citizen Saving Certificates (CSCs).

He further added that NRB and commercial Banks are the main holders of government bonds. In his article he suggested following improving area in debt securities market in Nepal:

- To make government securities active instruments of open market operation, coupon rate on government securities has to be fixed closely to the market rate of interest.
- Exchange of government securities at market price has to be encouraged.
- Products of government debt securities need to be diversified to meet investor demands.
- Like equity shares the marketable government securities need to be exchanged in the floor of Nepal Stock Exchange at competitive price. (Poudel, 2059; 45-51)

Bodhi B. Bajracharya has mentioned in his article, “Monetary Policy and Deposit Mobilization in Nepal” has concluded that the mobilization of domestic savings is one of the monetary policies in Nepal. For this purpose commercial banks stood as the vital and active financial intermediary for generating resources in the form of deposit of the private sector so far providing credit to the investors in different aspects of the economy.(Bajracharya,1990;93-97)

2.2. b) Review of Research Papers

Under this heading, reviews of research papers of researchers are analyzed to find out the investment policies of commercial banks.

Dr. Govinda Bahadur Thapa, expresses his views in his research paper “Financial System of Nepal” that the commercial banks including foreign joint venture banks seem to be doing pretty well in mobilizing deposits. Likewise, loans and advances of these banks are also increasing. But compared to high credit needs particularly by newly emerging industries, the bank still seems to lack adequate funds.

The banks are increasing their lending to non –traditional sectors along with the traditional sectors.

Out of all commercial banks (excluding two recently opened regional commercial banks), Nepal Bank Ltd. and Rastriya Banijya Bank are operating with a nominal profit, the later turning towards negative from time to time. Because of growing competition and limitation of investment sectors, the spread between interest income and interest expenses is declining. These banks have not been able to increase their income from commission and discount. On the contrary, they have got heavy burden of personal and administrative overheads. Similarly, due to accumulated overdue and defaulting loans, profit position of these banks has been seriously affected.

On the other hand, the foreign joint venture banks have been functioning in an efficient way. They are making profit year after year and have been distributing bonus to their employees and dividends to their shareholders.

He concludes that by its very nature of the public sector, these two domestic banks couldn't compete with the private sector banks, so only remedy to the problems of these banks, as the government decided, is to hand over the ownership as well as the management of these banks to the private hands (Dr. Thapa, 1994,PP29-37).

Dr. Radhe S. Pradhan in his research paper “Role of Saving, Investment and Capital formation in Economic Development. A case of Nepal,” has studied about the strong role and impact of saving, investment and capital formation on economic development of Nepal. This study is based on secondary data only. The necessary data on saving, investment, capital formation and gross domestic product has been collected for the period of 1974/75 to 2000/01. The role and impact of saving, investment and capital formation on economic development were analyzed by using various regression models. The regression equations used in this study have been estimated at current prices as well as in real terms with the entire study period divided into different sub periods.

The results presented in this paper suggest that in all cases, GDP is significantly associated with saving, investment and capital formation both at current

prices and in real terms. The results of the empirical analysis led to three important conclusions: First, saving, investment and capital formation have positive impact on economic development. Second, the current values and past values of saving, investment and capital formation have positive impact on economic development but the current values have the largest impact. Third, there is a strong role played by saving and capital formation on economic development while weak role-played by investment. (Dr. Pradhan, 2003; pp 123-133)

2.2. c) Review of Thesis

Several thesis works have been conducted by various students regarding the various aspects of commercial banks such as lending policy, investment policy, investment planning, liquidity and investment position, trends of saving investment and capital formation, investment on priority sectors etc. Some of them as supposed to be relevant for the study are presented below.

Mrs. Ramala Bhattarai, in her thesis, “Lending Policy of Commercial Banks in Nepal,” has made an effort to examine the lending policy of commercial banks. She has concluded that efficient utilization of resources is more important than collection of the same. Lower investment means lower capital formation that hampers economic development of the people and the country. So, she recommended that banks give emphasis on efficient utilization of resources (Bhattarai, 1978)

Sunity Shrestha has conducted a study on “Investment Planning of Commercial Banks in Nepal” with the objectives:

- To evaluate the financial performance of commercial banks in Nepal.
- To examine the investment of commercial banks of Nepal with reference to securities, loans & advances.
- To establish the relationship of banks’ portfolio variables with the national income and interest rates.

The research findings of the study are summarized as:

- The general trend of commercial banks asset holding is growing. Deposits have been a major source of funds. The excess reserve level of the banks

allows idle money and loss of opportunity. Debt equity ratios are very high, greater than 100%.

- The return ratios are on the average higher for foreign joint venture banks than for the Nepalese bank but return of asset found to be statistically some. Risk taking attitude is higher in foreign joint venture banks. The total management achievement index is higher in case of foreign banks in comparison to the Nepalese banks.
- The hypothesis that the commercial banks have non –professional style of decision making in investment has been accepted. The investment of commercial banks in shares and securities is normal and not found to have strategic decision towards investment in shares and securities. Yield from the security has been found to be satisfactory.
- Investment in various economic sectors shows industrial and commercial sector taking higher shares of loan till 1990.
- Investment in various sectors has a positive impact on the national income from their respective sectors.
- Lending in priority sector showed cottage and small industry sector sharing higher loans.
- Priority sector lending showed positive impact on the national income.

The secured loan analysis showed commercial loan as being very important followed by social and industrial loans. The loan loss ratio has been found to be increase with low recovery of loan. Demand of bank credit has been found to be affected by the national income and lending and Treasury bill rate. The investment of commercial banks on government securities has been observed to be affected by total deposit, cash reserve requirements and Treasury bill and lending rates. Interest rates, lending rate, deposit rate were found to constitute a set of significant variables affecting the bank portfolio composition. (Dr.Sherestha, 1993)

Kishor Poudel's, in his thesis paper “Liquidity and Investment Position of Joint Venture Commercial Bank in Nepal” had made an attempt to evaluate liquidity and investment of joint venture Banks, special reference to Everest Bank Ltd. and Nabil Bank Ltd. He has concluded that liquidity position of EBL is comparatively better than Nabil. Growth rate of investment is higher in EBL than Nabil. He further

found the banks do not have constant and consistent liquidity and investment policy. There is no standard and uniform rate or ratio for maintaining liquid assets by the commercial banks. A commercial bank at its own judgment may decide to maintain an appropriate level of liquid assets. So he has recommended exploring such investment and to increase its investment on share and debenture and the bank should have laid down policy for timely review of portfolio and to maintain risk and return.(Poudel,2002)

Sharad Wagle's Study; in his thesis paper "A study on trends of savings, investment and capital formation in Nepal", he concluded that in Nepal there is large gap between investment and saving rate. The low savings rate implies that majorities of people are poor. Low rate of saving and investment has been the continuing characteristic of the Nepalese economy as compared to some selected Asian countries. The need for the improving internal savings and investment performance in the country has been high in the agenda of Nepalese policy declarations but the performance in has remained rather poor. The rate of investment and capital formation is low in Nepal because of low saving. He has recommended that the government should review existing restriction on foreign direct investment. (Wagle, 2000)

Mrs. Rabina Bajracharya, in her thesis paper entitled, "Investment of Commercial Banks in Priority Sector" has made an effort to examine the banking procedures and services in disbursing loan in priority sector. She has found that:-

- The target of 12% investment of total outstanding liabilities in priority sector and 3% out of which has been invested in deprived sector has been met by Rastriya Banijya Bank.
- The trend of investment are continued to increase in the following years.
- The regression analysis of the investment and relationship between investment and repayment.
- Investment on agriculture is higher than investment on industry and service sector because investment on agriculture benefited a higher number of households. (Bajracharya, 2000)

Kul Chandra Pandit in his thesis, “A study on the investment policy analysis of Standard Chartered Bank Nepal Limited in comparison to Nabil and Nepal Bangladesh Bank” has mainly found that SCB’s loan & advances to total deposits ratios are significantly lower than that of Nabil and Nepal Bangladesh Bank, SCB is recommended to follow a liberal lending policy, invest more portion of deposition loan & advances. He has further stated that besides giving priority of investing on government securities, SCB is recommended to invest its fund in the purchase of shares and debentures of other financial, non-financials companies, hotels and government companies. This also helps in the maintenance of a sound portfolio of the banks. (Pandit, 2003)

Mukunda Prasad Lamichhane in his thesis, “Investment policy of the Joint Venture Banks in Nepal” had analyzed between investment policy and different variables like deposits, commission and discount, net profit, interest on loan and investment. He applied correlation, ratio analysis, t- test, and standard deviations.

He concluded that there is significant relationship between deposit and loan and advances as well as outside assets and net profit but not deposits and total investment in case of Nabil and other joint venture banks. Most of the joint venture banks have focused their banking services especially to big clients such as to purchase shares and debentures of other financial and non-financial companies. (Lamichhane, 2000).

2.3 Review of Legislative Provisions

In this section review of legislative framework under which the commercial banks are operating has been discussed. This legislative environment has significant impact on the commercial banks’ establishment, their mobilization and utilization of resources. All the commercial banks have to conform to the legislative provisions specified in the Bank and Financial Institutions Ordinance and Companies Ordinance, NRB Directives and other rules and regulations formulated to facilitate the smooth running of commercial banks.

Investment Management Regulation

“A commercial bank formulating a written policy may decide to invest in shares and securities of an organized institution. However, such investment is restricted to 10% of paid up capital of the organization. However, the cumulative amount of such investment in all the companies in which the bank has financial interest shall be limited to 20% of the paid up capital of the bank. But the total amount of investment in share and securities of organized institution is restricted to 30% of the paid up capital of the bank.”(Unified Directives No.8, NRB Banking operation department 81-82)

Likewise, commercial banks are not allowed to invest in any shares, securities, and hybrid capital instruments issued by any banks and financial institutions, licensed by NRB. Where such investment exists prior to issuance of this directive, such investment should be brought within the restrictive limitations by the fiscal year 2060/61. But investment on rural micro finance development banks' shares are not comes under such restriction. A commercial bank is directly related to the fact that how much fund must be collected as paid up capital while being established at a certain place of the nation, how much fund is needed to expand the branch and counters, how much flexible and helpful the NRB rules are also important. But we discuss only those, which are related to investment function of commercial banks. The main provisions, established by NRB in the form of prudential norms in above relevant area are briefly discussed here under.

i) Provisions for investment in the deprived sector

Some rules, which are formulated by NRB, affect the areas of credit and investment extension to the deprived sector by the commercial bank.

According to the new provision, with effect from the 3rd quarter of FY 1995/96, investment in shares of the rural development bank by CBs, which used to be counted for the priority sector lending, only is now to be included under the deprived sector lending.

According to the new provisions effective from FY 1997/98, NBL, RBB, NABIL, NGBL, NIBL are required to invest 3 percent, HBL, NSBL, NBBL, EBL, are required to invest 2 percent, Bank of Kathmandu is required to invest 1.75 percent, NBCL is required to invest 0.75 percent while new commercial banks are required to invest 0.25 percent of their total loans and advances to the deprived sector.

ii) Provision for credit to the priority sector

NRB requires commercial banks to extend loan and advances, amounting at least to 12 p.c. of their total outstanding credit to the priority sector. Commercial banks credit to the deprived sector is also a part of priority sector. Under priority sector, credit to agriculture, credit to the cottage and small industries and credit to service are counted commercial bank's loan to the co-operatives licensed by the NRB is also to be computed as the priority sector credit from the fiscal year 1995/96 onwards.

iii) Provision for the investment in productive sector

Nepal, being a developing country needs to develop infrastructure and other primary productive sectors like agriculture, industry etc. For this, NRB has directed commercial banks to extend at least 40 p.c. of their total credit to the productive sectors. Loans to priority sector, agriculture sector, and industrial sector have to be included in productive sector investment.

iv) Provision for the single borrower credit limit

With the objectives of lowering the risk of over concentration of bank loans to a few big borrowers and also to increase the access of small and middle size borrower to the bank loans, NRB directed CBs to set an upper limit on the amount of loan financed to an individual, firm, company or group of companies. According to this, CBs are required not to exceed the single borrower limit of 35 percent in the case of fund- based credit and 50 percent, in the case of non- fund based credit such as the letter of credit, guarantee, acceptance letter, commitment has been fixed is a proportion of capital funds of bank.

Similarly, NRB has graded six foreign joint venture banks now as the prestigious class “A” bank, which is NABIL, NGBL, NIBL, HBL, SBI, and NBBL. These banks have been kept outside the purview of the single borrower credit limit.

Likewise, in the case of consortium financing, commercial banks are permitted to extend an additional 10 percent credit above the limit fixed by the NRB as before.

In addition, Nepal Oil- Corporation, Agriculture-inputs Corporation and Nepal Food Corporation for their imports of petrol, diesel, kerosene, fertilizer and foodstuff respectively have been removed from the restrictions of single borrower credit limit.

v) Provision for minimize liquidity risk

Commercial banks are required monitor their liquidity risk. This is to minimize risk inherent in the activities and portfolio of the banks. According to the regulation a gap found between maturing assets and maturing liabilities is the liquidity risk. They are monitoring their assets and liabilities on the basis of maturity period. Maturity periods such as 0-90, 91-180, 181-270, 271-365 days and above 1 year are classified for the purpose of checking.

vi) Cash reserve requirements (CRR)

To ensure adequate liquidity in the commercial banks, to meet the depositors’ demand for cash at anytime and to inject the confidence in depositors regarding the safety of their deposited funds, commercial banks are required to have maximum CRR. In this regard, NRB has directed commercial banks to deposit minimum 8 percent of current and saving and 6 percent of fixed deposits in the NRB as primary cash reserve the commercial banks are further required to have 3 percent cash of total deposits in their own bank as secondary reserve.

vii) Loan classification and loss provision

With a view to improving the quality of assets of commercial banks NRB has directed commercial banks to classify their out-standing loan and advances, investment and other assets into six categories. The classification is done in two ways. The loans of more than one lakh are to be classified as debt service charge ratio,

repayment situation, financial condition of borrower, management efficiency, quality of collateral. The loans of less than one lakh have to be classified as per maturity period.

viii) Directives regarding interest rate spread

The interest rate spread, the difference between interest charged on loan and advances and the interest paid to the depositors, has widened significantly in the aftermath of deregulation in interest rates. This has caused lower financial intermediation. Therefore, NRB has required commercial banks to limit interest rate spread between deposit and lending rates to a maximum extent of 5 percent. NRB has also provided commercial banks with new calculation method of interest rate spread for a certain period recently.

Commercial Banks and their investment policy

The term “bank” derives from the Latin “bancus”, which refers to the bench on which the banker would keep it’s money and records. Some person traces its origin to the Italian word “banca”, which means a bench for keeping. Lending and exchanging of money. A bank is one who in the ordinary course of his business receives money which he pays by honouring cheques of persons from whom or whose account receives (Hampton, 2001).

Shakespeare (2001) in his book “banking and insurance management” has classified banks as:

- | | |
|----------------------|----------------------|
| 1. Central Bank | 2. Commercial Bank |
| 3. Agricultural Bank | 4. Co-operative Bank |
| 5. Merchant Bank | 6. Mutual Bank |
| 7. Industrial Bank | 8. Exchange Bank |
| 9. Saving Bank | 10. Pension Bank |
| 11. Housing Bank | 12. Equipment Bank |

Commercial banks are those banks which perform all kinds of banking functions as accepting deposits, advancing loans, credit creation, and agency function. They provide short term, medium term and long term loans to trade and industry. They also operate off balance sheet functions such as issuing guarantee. Bonds, letter

or credit, etc. commercial banks are institutions which provide services such as accepting deposits and giving business loans. They are one the vital aspects of banking sector, which deal in the process of channel zing the available resources in the needed sectors.

As per the commercial bank act 2031bs. “A commercial bank means the bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions.” Commercial banks bring into bring the most important ingredient of the money supply , demand deposits through the creation of credit in the form of loan and investments(Crosse, 1963).

Commercial banks deal with other people’s money. They have to find ways of keeping their liquid assets so that they could meet demands of their customers. Their motive is wealth maximization and giving maximum benefit to its shareholders. In the anxiety to make profit, the bank cannot afford to lock up their funds in assets, which are not easily releasable. The depositors must be to understand the bank is fully solvent. The depositor’s confidence could be secured only if the bank is able to meet the demand for cash promptly and fully. The bankers cannot afford to keep a large possession of his assets in the form of cash; Cash brings in no income to the bank. Therefore, the banker has to distribute his assets in such a way that he can have adequate profits without sacrificing liquidity.

Commercial banks are profit making organizations. A bank established without the aim of gaining the profit is the central bank. Other banks are inspired with the object of earning profit and helping the economic development. They should have the ability to use the policy of banking investment to implement it much more carefully otherwise a bank may be unsuccessful in its goal.

Without investment, a bank can’t gain profit. Therefore, after the establishment of bank it collects deposits. It also collects capital by selling its shares. Thus, a great capital is collected in the bank. It is not better to keep such capital fund inactive. The bank should able to clear the policy of its investment by making deep study. Every commercial bank has an investment policy. The basic factors that will determine the objectives of a bank’s investment policy are its income and liquidity

needs and management's willingness to trade liquidity for greater income opportunities and vice versa, which means accepting greater or less risk. A bank that has a portfolio of high quality loans and relatively stable deposits can assume more risk. It might be preferable for the bank to pursue an aggressive lending policy. The higher risk in the loan portfolio would be countered with a very liquid investment portfolio. One of the acceptable methods of reducing risk is by diversification, a basic and important rule of any investment. The investment process includes following steps;

1. Setting investment objectives
2. performing security analysis
3. Constructing a portfolio
4. Revision of portfolio
5. Evaluation portfolio evaluation

Banks have developed format, written lending policies in recent years. They provide guidance for lending officers by establishing a greater degree of uniformity in lending practices.

Emphasizing the importance of investment policy, lending is the essence of commercial banking: consequently the formulation and implementation of sound policies are among the most important responsibilities of bank directors and management (Crosse, 1963), Crosse further adds, the formulation of sound lending policies for all banks should have adequate and careful consideration over community needs, sizes of loan portfolio, character of loan, credit worthiness of borrower and asset pledged to security borrowing, interest rate policy.

The investment policy of a bank should be reviewed occasionally and modified as economic conditions change. It should be reviewed when developments occurring within or outside the bank dictate.

Loan and Loan Process of Commercial Bank

Money advanced to a borrower, to be repaid at a later date, usually with interest. Legally, a loan is a contract between a buyer (the borrower) and a seller (the

lender), enforceable under the Uniform Commercial Code in most states. The terms and conditions for repayment of a loan, including the finance charge or interest rate, are specified in a loan agreement. A loan may be payable on demand (a Demand Loan), in equal monthly installments (an Installment Loan), or they may be good until further notice or due at maturity (a Time Loan).

There are various methods lenders use to categorize loans, both for internal control and for reporting lending activity to governmental agencies, for example, classification by maturity, industry, security, and type of borrower. Bank loans are normally classified by: (1) Commercial & Industrial Loans to business organizations; (2) interbank loans, which are mostly Federal Funds transactions, from one bank to another; (3) Loan Participations or loans to a single borrower shared by several banks; (4) real estate loans, which may be subdivided into construction loans and long-term Mortgage loans; and (5) loans to consumers, such as auto loans and other forms of consumer installment credit. *See also* Consumer Credit; Credit; Loan Participation; Parallel Loan; Secured Loan; Syndicated Loan; Term Loan; Time Loan; Unsecured Loan; Working Capital Loan.

Loan, in business, sum of money borrowed at a particular interest rate. More generally, it refers to anything given on condition of its return or repayment of its equivalent. A loan may be acknowledged by a bond, a promissory note, or a mere oral promise to repay. Because of biblical injunctions against usury, the early Christian church forbade the taking of interest. In feudal European society, loans were little needed by the great mass of relatively self-sufficient and noncommercial peasants and serfs, but kings, nobles, and ecclesiastics were heavy borrowers for personal expenditures. Merchants and other townsmen, especially the Jews, were the moneylenders, and various devices were found for circumventing the prohibition of usury. With the rise of a commercial society, restrictions on the taking of interest were gradually relaxed. Today, banks and finance companies make most loans, usually on collateral, such as stocks, personal effects, and mortgages on land and other property, or on assignments of wages. Credit unions have attained some importance in making personal loans at relatively low interest rates, and microcredit programs and organizations, which offer small-scale loans, have proved useful, particularly in

developing countries, in helping individuals to establish small businesses. A pawnbroker lends money on the security of articles left in his shop.

Types of loans

Secured

See also: Loan guarantee

A secured loan is a loan in which the borrower pledges some asset (e.g. a car or property) as collateral for the loan.

A subsidized loan is a loan that will not gain interest before you begin to pay it. It is known to be used at multiple colleges.

A unsubsidized loan is a loan that gains interest the day of disbursement.

A mortgage loan is a very common type of debt instrument, used by many individuals to purchase housing. In this arrangement, the money is used to purchase the property. The financial institution, however, is given security — a lien on the title to the house — until the mortgage is paid off in full. If the borrower defaults on the loan, the bank would have the legal right to repossess the house and sell it, to recover sums owing to it.

In some instances, a loan taken out to purchase a new or used car may be secured by the car, in much the same way as a mortgage is secured by housing. The duration of the loan period is considerably shorter — often corresponding to the useful life of the car. There are two types of auto loans, direct and indirect. A direct auto loan is where a bank gives the loan directly to a consumer. An indirect auto loan is where a car dealership acts as an intermediary between the bank or financial institution and the consumer.

A type of loan especially used in limited partnership agreements is the recourse note.

A stock hedge loan is a special type of securities lending whereby the stock of a borrower is hedged by the lender against loss, using options or other hedging strategies to reduce lender risk. *[citation needed]*

A pre-settlement loan is a non-recourse debt; this is when a monetary loan is given based on the merit and awardable amount in a lawsuit case. Only certain types of lawsuit cases are eligible for a pre-settlement loan.^[citation needed] This is considered a secured non-recourse debt due to the fact that if the case reaches a verdict in favor of the defendant the loan is forgiven.

Unsecured

Unsecured loans are monetary loans that are not secured against the borrower's assets. These may be available from financial institutions under many different guises or marketing packages:

- credit card debt
- personal loans
- bank overdrafts
- credit facilities or lines of credit
- corporate bonds (may be secured or unsecured)

The interest rates applicable to these different forms may vary depending on the lender and the borrower. These may or may not be regulated by law. In the United Kingdom, when applied to individuals, these may come under the Consumer Credit Act 1974.

Margin Lending

This loan is provided against the share of the companies, which are listed in Nepal Stock Exchange (NEPSE) and acceptable to the bank.

Eligibility

Any individual, companies and firms can take this loan. Bank all the borrowers should be Nepalese citizen. This loan can be taken against the shares owned by any person or company.

Document Required

Copy of citizenship certificate of the borrower and other owners of the shares.

For all

- Loan application form duly filled and signed.
- Original share certificates.
- Letter of consent issued the borrower addressed to the concerned companies for the pledge of share with related bank.
- Letter consent from borrower to the concerned company for the lies over shares in favor of related bank and accretion (Dividend, Bonus Shares, Right Shares)

For firm/ Partnership/ Company

- Firm Registration certificate
- Pan
- Partnership deed (in case of partnership firm only)
- Memorandum of association and articles of association (in case of company)
- By laws and articles (in case of association/ trust)
- Resolution of board/executive committee for obtaining the loan(in case of company/association/trust)
- Power if attorney for signing the loan application and security documents(in case of company associates)
- Personal guarantee of shareholders holding 10% of total shares or more(in case of company)

Personal Loans

-Personal Term Loan

-Personal Overdraft Loan

Provided to fulfill the personal needs of an individual

Provided against the land and building

Eligibility:

- Borrower must have regular and stable source of income
- Borrower must be Nepalese Citizen.
- The collateral must be accessible by at least eight feet wide road.
- Borrower must be 21 years of age and should not exceed 60 at the time of maturity of loan.

Home Loan**INVESTING WITH US ENTITLES**

Finance up to 70% of the total value for

- Readymade Houses/Buildings, Construction of House/Buildings, Readymade apartment, bungalow, duplex and Renovation and / or extension of building

Interest Rate

- 14.00% per annum for up to 5 yrs.
- 15.00% per annum above 5 yrs.

Tenure

- Maximum of 15 years
- Loan shall be terminated on /or before 60 years of age of the borrower.
- Repayment: Equal Monthly Installments (EMI)

ELIGIBILITY

- Age 18 years and above
- Professionals, salaried individuals and self employed individuals, etc...
- Nepali individuals
- Access to the property should be not less than 8' wide road

FEES AND CHARGES

The following charges are to be levied

Management fee: 1% of loan amount

Documentation Fee: NPR 3,000.00 flat

Prepayment Fee:

1% of pre-paid amount if prepaid within 5 years

0.5% of pre-paid amount if prepaid after 5 years

CIB Charge: NPR 750.00 per page

Home Loans

This loan is provided for

- Purchase a plot of Land
- Purchase a plot of land and construct a building on it
- Purchase of already built house
- Purchase of Bungalow constructed by builders / developers
- Renovation, modification, extension of existing building
- Construction of building on land already owned
- Swapping home loan from another bank or financial institutions.

Eligibility:

The criterion for taking home-loans is as follows.

- The loan is provided to any individuals who have regular and stable source of income. This loan can be given to any salaried and self-employed individuals.
- The loan will be provided to Nepalese Citizens only.
- Any house/land, which does not lie in municipal area, will not be financed. However, this loan can be provided to VDCs of Kathmandu, Lalitpur and Bhaktapur districts only, but proper justification is needed from the concerned branches.
- The land and/or house to be constructed / purchased / renovated / extended / modified should have motorable road (8 feet wide in minimum) access. Such road should be clearly seen in the blue print or be verified by concerned authority (for e.g. ward office). However the loan can be given even if the land and/or building does not have motorable road but applicant/borrower provides

land and/or house having motorable road access as additional collateral. The collateral must cover at least 100% of the loan. The mortgaged land/building should be in municipality area. But in case of Kathmandu, Lalitpur and Bhaktapur districts, if such land/building is located in VDC, the concerned branches have to justify and take approval from Consumer lending unit, Head Office.

- All borrowers and guarantor should not be enlisted in “Black List” of Nepal Rastra Bank.
- 3 years work experience is needed for salaried and self-employed individuals.
- The company or firm (in case of self employed individuals) should be in operation since last three years at minimum.
- The borrower must be at least 21years and should not exceed 60 years at the time of maturity. The retirement age must be more than the tenure of the loan.

Processing Fee:

1% of the financed amount shall be charged upfront at the time of submission of loan application with necessary documents. The fee shall be refunded if the loan is not approved.

Prepayment Fee:

2% prepayment charge on the prepaid amount if prepayment is made within 1/3 of loan period. However, no prepayment fee will be charged if paid after maturity of 1/3 of the loan period.

Notes:

- Corporate guarantee should be supported by resolution of Board of Directors.
- Original certificates should be presented for verification while submitting this form.
- Salary certificate must be in the office’s letterhead having seal and must contain net salary, your designation, years of service, date of retirement or

expiry of contract and type of employment (permanent or contract). It should be signed along with the name and designation of the signatory.

- The bank can demand any additional documents on its own discretion.

Auto Loans

This loan is provided for:

- Purchase of new vehicles
- Purchase of old / used vehicles (For Private use only)
- Swapping (For Private and Commercial use)

Eligibility:

The criterion for taking auto-loans is as follows.

- The loan is provided to Nepalese Citizens only.
- This is provided to any salaried and self-employed individuals and companies.
- The loan is provided to any salaried and self-employed individuals and companies having regular and stable source of income.
- All borrowers and guarantors should not be enlisted in “Black List” of NRB.
- In case of individuals, the borrower must be at least 21 years and should not exceed 60 years at the time of maturity. The retirement age must be more than the tenure of the loan.
- 3 years work experience is needed for salaried individuals.
- The company / firm should be in operation since last three years.
- The person taking loan for the company / firm is to be authorized by the company / firm as appropriate.

Processing fee:

1% of the financed amount shall be charged upfront at the time of submission of loan application with necessary documents. The fee shall be refunded if the loan is not approved.

Prepayment Fee:

2% prepayment charge on the prepaid amount if prepayment is made within 1/3 of loan period. However, no prepayment fee will be charged if paid after maturity of 1/3 of the loan period.

Notes:

All companies are required to submit their board resolution authorizing to execute loan/security documents with the bank to avail credit facility.

- Corporate guarantee should be supported by resolution of Board of Directors.
- Original certificates should be presented for verification while submitting this form.
- Salary certificate must be in the office's letterhead having seal and must contain net salary, your designation, years of service, date of retirement or expiry of contract and type of employment (permanent or contract). It should be signed along with the name and designation of the signatory.
- The bank can demand any additional documents at its own discretion.
- For commercial vehicles, detail breakdown of the income from and expenses of the vehicle (scheme) is necessary.

In case of swapping loan, loan statements from current bank / financial institutions is required

CHAPTER-III

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology is the research method used to test the hypothesis. It sequentially refers to the various steps to be adopted by a researcher in studying a problem with certain objectives in view. In other words, research methodology describes the methods and process applied in the entire subject of the study.

The prime objectives of this study are to evaluate analysis and assess the effectiveness on investment policy of Nabil Bank and compare it with Nepal Investment Bank. This chapter attempts to have an insight into the investment policy adopted by Nabil. This will help to evaluate and analyze investment performance of Nabil in comparison to the Investment Bank. After the analysis, a package of suggestion will be offered if need to be improving the performance of banks. To accomplish the goal, the study follows the research methodology described in this chapter.

3.2 Research Design

Research design indicates a plan of action to be carried out in connection with proposed research work. The research design is descriptive and core prescriptive in this study because the historical secondary data have been mainly deployed for analysis.

Some financial and statistical tools have been applied to examine facts and descriptive techniques have been adopted to evaluate investment performance of Nabil and compare it with NIBL. Besides very simple questions asked to the concerned personnel's in the course of visiting the bank, this report contains no other primary data. This report is mainly based on secondary data, which include annual reports published by the concerned bank and other publications related to the concerned topic.

3.3 Sources of Data

The report is mainly based on secondary data. The data required for the analysis are directly obtained from the balance sheet and P/L account of concerned bank's annual reports. Supplementary data and information are collected from number of institutions and regulating authorities like NRB, SEBON, NEPSE, Ministry of Finance, budget speech of different fiscal years and economic survey. All the secondary data are compiled, processed and tabulated in the time series as per the need and objectives. Likewise various data and information are collected from the economic journals, periodicals, bulletins, magazines and other published and unpublished reports and documents from various sources. Formal and informal talks with the concerned authorities of the bank were also helpful to obtain the additional information of the related problem.

3.4 Population and Sample

There are altogether 28 commercial banks functioning all over the kingdom and most of their stocks are traded actively in the stock market. The population is as follows:

1	Nepal Bank Limited
2	Rastriya Banijya Bank
3	Agriculture Development Bank Ltd.
4	Nabil Bank Limited
5	Nepal Investment Bank Limited
6	Standard Chartered Bank Nepal Limited.
7	Himalayan Bank Limited
8	Nepal SBI Bank Limited
9	Nepal Bangladesh Bank Limited
10	Everest Bank Limited
11	Bank of Kathmandu Limited
12	Nepal Credit and Commerce Bank Limited

13	Lumbini Bank Limited
14	Nepal Industrial & Commercial Bank Limited
15	Machhapuchhre Bank Limited
16	Kumari Bank Limited
17	Laxmi Bank Limited
18	Siddhartha Bank Limited
19	Global Bank Ltd.
20	Citizens Bank International Ltd.
21	Prime Commercial Bank Ltd
22	Sunrise Bank Ltd.
23	Bank of Asia Nepal Ltd.
24	Development Credit Bank Ltd.
25	NMB Bank Ltd.
26	Kist Bank Ltd.
27	Janata Bank Ltd
28	Mega Bank Ltd.

From these populations Nabil Bank Ltd. and Nepal Investment Bank Ltd. has been selected and its data related to investment policy are comparatively studied.

3.5 Methods of Analysis

As mentioned above for the purpose of data analysis, various financial, accounting and statistical tools are used to make the analysis more effective, convenience, reliable and authentic. The analysis of data will be done according to the pattern of data available because of limited time and resources. Simple analytical statistical tools such as percentage, Karl person's coefficient of correlation, regression, and trend analysis standard deviation, and mean/average, coefficient of variation and test of hypothesis are used in this study. Similarly some financial tools

have also been used for financial analysis. The various tools applied in this study have been briefly presented as under.

3.5.1 Financial Tools

Financial tools are used to examine the financial strength and weakness of bank in this study. Financial tool like ratio analysis has been used.

Ratio Analysis

Ratio analysis is a tool of scanning the financial statement of the firm. “Ratio means the numerical or quantitative relationship between two items or variables. It can be expressed as percentage fraction or a stated comparison between numbers.” (I.M.Panday, 1992; 104) Ratio analysis is the relationship between two accounting figures expressed in mathematically. It is computed by dividing one item of relationship with the other. Management itself can use these parameters to improve the organization’s performance in future. Because, truly know- how of the strengths and weakness for exploiting maximum benefits and to repair the weaknesses to meet the challenges.

Even though there are many ratios, only those financial ratios are calculated and analyzed which are related in this study. They are as follows:

A) Liquidity Ratios

Liquidity ratios measure the firm’s ability to current obligations. It reflects the short – term financial strength of the business. It is the measurement of speed with which a bank’s assets can be converted into cash to meet deposit withdrawal and other current obligations. A bank should ensure that it does not suffer from lack of liquidity and also it does not have excess liquidity. Both condition of liquidity are not in favor the viewpoint of banks.

The following ratios are evaluated under liquidity ratios.

i) Current Ratio

A ratio between current assets and current liabilities is known as current ratio. It shows the relationship between current assets and current liabilities. Current assets are those assets which can be converted into cash within short period of time, normally not exceeding one year current liabilities are those obligations which are payable within a short period, normally not exceeding one year.

Mathematically it is represented as:

$$\text{Current ratio} = \frac{\text{Total Current Assets}}{\text{Total Current Liabilities}}$$

Higher the current ratio better is the liquidity position. The widely accepted standard of current ratio is 2:1 but accurate standard depends on circumstances in case of seasonal business ratio.

This ratio measures the bank short-term solvency i.e. its ability to meet short-term obligations. As a measure of creditors versus current assets, it indicates each rupee of current assets available for each rupees of current liability.

ii) Cash and Bank Balance to Total Deposit Ratio (Cash Reserve Ratio)

Cash and bank balances are the most liquid current assets. This ratio measures the percentage of most liquid fund with the bank to make immediate payment to the depositor. This ratio is calculated by dividing the cash and bank balance by the amount of total deposits. Mathematically it is expressed as,

$$\text{CRR ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

Hence, cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and abroad banks where as the total deposits include current deposits, saving deposits, fixed deposits, money at call and short term notice and other deposits.

iii) Cash and Bank Balance to Current Assets Ratio

This ratio measures the proportion of most liquid assets i.e. cash and balance among the total current assets of the bank. Higher ratio shows the banks ability to meet its demand for cash.

This ratio is calculated by dividing cash and bank balance by current assets.

Mathematically it is expressed as,

$$\text{Cash and bank balance to current assets ratio} = \frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

iv) Investment on Government Securities to Current Assets Ratio

Investment on government securities includes treasury bills and development bonds etc. This ratio is calculated to find out the percentage of current assets invested in government securities.

This ratio is calculated by dividing investment made on government securities by current assets,

Mathematically it is expressed as,

Investment on govt. securities to current assets ratio

$$= \frac{\text{Investment on Government Securities}}{\text{Current Assets}}$$

v) Loan and Advances to Current Assets Ratio

Loan and advances to current asset ratio shows the percentage of loan and advances in the total current assets. Where loan & advances include loans, advances, cash credit, local and foreign bill purchased and discounted etc.

This ratio can be calculated by dividing loans and advances by current assets.

Mathematically it is expressed as,

$$\text{Loan and advances to current assets ratio} = \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

B) Assets Management Ratios (Activity Ratios)

Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. These ratios are also called turnover ratios because they indicate the speed with which assets are being converted turnover into sales. Asset management ratio measures how efficiently the bank manages the resources at its command.

The following ratios are used under this asset management ratio.

i) Loan and Advances to Total Deposit Ratio

This ratio is calculated to find out that which banks are able to utilizing their total deposits on loan and advances for profit generating purpose. This ratio can be obtained by dividing loan and advances by total deposits, which can be states as,

$$\text{Loan and Advances to Total Deposit Ratio} = \frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

ii) Total Investment to Total Deposit Ratio

This ratio implies the utilization of firm's deposit on investment in government securities and share debentures of other companies and bank.

This ratio can be calculated by dividing total investment by total deposit. Which can be states as?

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

Hence, total investment consist investment on government securities, investment on debenture and bonds, share in subsidiary companies, share in other companies and other investment.

iii) Loan and Advances to Working Fund Ratio

Loan and advances indicates the ability of any bank to canalize its deposits in the form of loan and advances to earn high return. This ratio is computed by dividing loan and advances by total working fund, which can be states as,

$$\text{Loan and Advances to Working Fund Ratio} = \frac{\text{Loan and Advances}}{\text{Working Fund Ratio}}$$

Where, Total working fund consists current assets, net fixed assets, loan for development banks and other miscellaneous assets.

iv) Investment on Government Securities to Total Working Fund Ratio

This ratio shows that banks investment on government securities in comparison to the total working fund.

This ratio is calculated by dividing investment on government securities by total working fund, which can be states as,

Investment on Govt. Securities to

$$\text{Total Working Fund Ratio} = \frac{\text{Interest on Govt. Securities}}{\text{Working Fund Ratio}}$$

Hence, Investment on government securities includes treasury bills and development bonds etc.

v) Investment on Shares and Debentures to Total Working Fund Ratio

This ratio shows the banks investment in shares and debenture of the subsidiary and other companies.

This ratio can be computed by dividing investment on shares and debentures by total working fund, which can be states as,

Investment on Shares & Debentures to Total Working Fund Ratio

$$= \frac{\text{Investment on Shares and Debentures}}{\text{Working Fund Ratio}}$$

Where, Numerator includes investment on debentures bonds and shares of the other companies.

C) Profitability ratios

Profit is the difference between revenues and expenses over a period of time. A company should earn profit to survive and grow over a long period of time, and it will have no future if it fails to make sufficient profits. Therefore, the financial manager should continuously evaluate the efficiency of its company in terms of profits. The profitability ratios are calculated to measure the operating efficiency of a company. It is the indicator of the financial performance of any institution. This implies that higher the profitability ratio, better the financial performance of the bank and vice versa.

The following ratios are taken into account under this heading.

i) Return on Total Working Fund Ratio

This ratio measures the overall profitability of all working funds i.e. total assets. A firm has to earn satisfactory return on assets or working fund for its survival. This ratio is calculated by dividing net profit by total working fund.

This can be express,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net Profit}}{\text{Working Fund Ratio}}$$

ii) Return on Loan & Advances Ratio

This ratio indicates how efficiently the bank has employed its resources in the form of loan and advances. This ratio is computed by dividing net profit by loan & advances.

This can be expressed as,

$$\text{Return on Loan \& Advances Ratio} = \frac{\text{Net Profit}}{\text{Loan and Advances}}$$

iii) Total Interest Earned to Total outside Assets Ratio

This ratio measures the interest earning capacity of the bank through the efficient utilization of outside assets. Higher ratio implies efficient use of outside assets to earn interest.

This ratio is calculated by dividing total interest earned by total outside assets; this can be expressed as,

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

iv) Total Interest Earned to Total Working Fund Ratio

This ratio is calculated to find out the percentage of interest earned to total assets (working fund). Higher ratio implies better performance of the bank its terms of interest earning on its total working fund. This ratio is calculated by dividing total interest earned by total working fund.

This can be expressed as,

$$\text{Total Interest Earned to Total Working Fund Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

Where, total interest earned includes, interest on loan, advances and overdrafts, government securities investment debentures and other interbank loans.

v) Total Interest Paid to Total Working Fund Ratio

This ratio is calculated to find out the percentage of interest paid on liabilities with respect to total working fund. This ratio is calculated by dividing total interest paid by total working fund.

Which, can be expressed as

$$\text{Total Interest Paid to Total Working Fund Ratio} = \frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

Where, total interest paid includes total expenses on deposits, loan and advances, borrowings and other deposits.

D) Risk Ratios

Risk taking is the prime business of bank's investment management. It increases effectiveness and profitability of the bank. These, ratio indicate the amount of risk associated with the various banking operations, which ultimately influences the bank investment policy.

The following ratios are taken into account under this heading.

i) Liquidity Risk Ratio

The Liquidity risk ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance that are kept in the bank for the purpose of satisfying the depositor's demand for cash. Higher the ratio, lower is the liquid risk. Dividing cash & bank balance calculate this ratio by total deposits. This can be mentioned as,

$$\text{Liquidity Risk Ratio} = \frac{\text{Total Cash \& Bank Balcne}}{\text{Total Deposit}}$$

ii) Credit Risk Ratio

Credit risk ratios measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. By definition, credit risk ratio is expressed as the percentage of non-performing loan to total loan & advances. This ratio is calculated by dividing total loan and advances by total assets.

This can be mentioned as,

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan and Adavances}}{\text{Total Assets}}$$

iii) Capital Risk Ratio

The capital risk ratios of a bank indicate how much asset values may decline before the position of depositors and other creditors jeopardize. The capital risk is directly related to the return on equity (ROE). Higher the ratio, low is the capital risk.

This ratio is computed by dividing capital (Paid up Capital + Reserves) by risk-weighted assets as computed under BASLE committee's formula.

This can be mentioned as,

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid up + Re serves)}}{\text{Risk Weighted Assets}}$$

E) Growth Ratios

Growth ratios measure how well the firm is maintain its economic position in its industry. It is directly related to the fund mobilization an investment management of a commercial bank.

The following growth ratios are calculated in this study.

- i. Growth ratio of total deposit
- ii. Growth ratio of loan & advances
- iii. Growth ratio of total investment
- iv. Growth ratio of net profit

3.5.2 Statistical Tools

Some important statistical tools are used to achieve the objective of this study. In this study, statistical tools such as trend analysis of important variables, co-efficient of correlation between different variables as well as test of hypothesis have been used which are as follows:

i) Average/Mean

The average is a single value related from a group of values to represent them in someway, a value, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group. ² There are various types of averages. Arithmetic mean (Simple & Weighted), median, mode, geometric mean, harmonic mean are the major types of averages. The most popular and widely used measure representing the entire data by one value is the AM. The value of the AM is obtained by adding together all the items and by dividing this total by the number of items.

Mathematically:

Arithmetic Mean (AM) is given by,

$$\bar{X} = \frac{\sum X}{n} \dots\dots\dots(3.1)$$

Where, \bar{X} = Arithmetic mean

$\sum x$ = Sum of all the values of the variable X

n = Number of observations

ii) Standard Deviation

The standard deviation (σ) measures the absolute dispersion. The greater the standard deviation, the greater will be the magnitude of the deviations of the values from their mean. A small standard deviation means a high degree of uniformity of the observations as well as homogeneity of a series and vice versa.

Mathematically:

$$\sigma = \sqrt{\frac{1}{n-1} \sum (X - \bar{X})^2} \dots\dots\dots (3.2)$$

iii) Coefficient of Variation

The standard deviation is absolute measures of dispersion; where as the coefficient of variation (CV) is a relative measure. To compare the variability between two or more series, CV is more appropriate statistical tool.

Mathematically,

$$CV = \frac{\sigma}{X} \dots\dots\dots (3.3)$$

iv) Trend Analysis (Least square Method)

This topic analyzes the trend of loan and advances to total deposit ratio and trend of total investment to total deposit ratio of Nabil and NIBL from 2002/2003 to 2008/2009 and makes the forecast for the next five years. Under this topic following sub-topic has been presented.

- i) Trend analysis of loan and advances to total deposits ratio.
- ii) Trend analysis of total investment to total deposit ratio.

The trend line between the two variables X and Y is respected by

$$Yc=a+bx$$

Where,

$$a=\frac{\sum y}{n} \text{ and } b=\frac{\sum xy}{\sum x^2} \dots\dots\dots (3.4)$$

v) Co- efficient of Correlation Analysis

This analysis identifies and interprets the relationship between the two or more variables. In the case of highly correlated variables, the effect on one variable may have effect on other correlated variable under this topic, Karl Pearson's co-efficient of correlation has been used to find out the relationship between the following variables.

- i. Co-efficient of correlation between deposit and loan & advances.
- ii. Co-efficient of correlation between deposit and total investment.
- iii. Co- efficient of correlation between total outside assets and net profits.

These tools analyze the relationship between these variables and help the banks to make appropriate policy regarding deposit collection, fund utilization (loan & advances and investments) and maximization of profit.

It is denoted by 'r' and is defined by

$$r=\frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}} \dots\dots\dots (3.5)$$

where,

$$x = x - \bar{x}$$

$$y = y - \bar{y}$$

the value of 'r' always lies between (-1) and (+1), (r=+1) denotes the perfect positive correlation between the two variables and (r=-1) denotes the negative correlation between two variables.

vi) Test of Hypothesis

The objective of this test is to test the significance regarding the parameters of the population on the basis of sample drawn from the population. This test has been conducted on the various ratios related with the banking business.

* Test of hypothesis on loan and advances to total deposit ratios between Nabil & NIBL.

Research methodology and the various financial and statistical tools discussed above have been used in the next chapter to analyze and interpret the data regarding the Nabil & NIBL for the study period from Fiscal year 2002/2003 to 2008/2009.

vii) Probable Error (P.Er)

It's the measure of testing reliability of the calculated value of 'r'. If r be calculated value of r from a sample of n pair of observations then PE is defined by

$$P.Er = 0.6745 * \frac{1-r^2}{\sqrt{n}} \dots\dots\dots (3.6)$$

Of the value of 'r' is less than 6PE (r<6P.Er), it's significant; perhaps there is no evidence of correlation. If 'r' is greater than 6PE (r>6P.Er), then, it is insignificant. The problem earn of correlation coefficient is used to determine the limits with in which the population correlation coefficient lies. Limit for population correlation coefficient are r+P.E

CHAPTR-IV

DATA PRESENTATION AND ANALYSIS

4.1 Financial Analysis

This is analytical chapter, where the researcher has analyzed and evaluated those major financial items, which are mainly related to the investment management and fund mobilization of NABIL Bank limited in comparison to that of other commercial Bank i.e. Investment Bank Limited. From the point of view of the fund mobilization and investment policy only those ratios are calculated and analyzed which are very important. The rations are designed and calculated to highlight the relationship between financial items and figures. It is a kind of mathematical relationship and procedure dividing one item by another. All these calculations are based on financial statements of concerned banks. The important and needed financial ratios, which are to be calculated for the purpose of this study, are as fallows respectively.

4.1.1 Liquidity Ratio

Liquidity ratio measures the ability of the firm to meet its current obligations. A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the community, to meet demands for deposits, withdraws, pay maturity obligation in time and convert non-cash assets into cash to satisfy immediate needs without loss to bank and consequent impact in long run profit. In fact analyses of liquidity needs are helpful to the preparation of cash budget and funds flow statement.

The following ratios are evaluated and interpreted under liquidity ratio: -

(i) Current Ratio

Current ratio indicates the ability of a bank to meet its current obligation. This is the broad measure of liquidity position of the financial institution. The widely accepted standard of current ratio is 2:1 but accurate standard depends on circumstances in case of banking and seasonal business ratio such as 1:1 etc.

We have,

$$\text{Current ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Where,

Current assets consist of cash and bank balance, money at call or short-term notice, investment in government securities and other interest receivable, non banking assets, loan advances and bills purchase and other miscellaneous current assets where as current liabilities consist of deposits, borrowings, loan and advances, bills payable, tax provision, Staff bonus, dividend payable and miscellaneous current liabilities.

Table No: 4.1

Current Ratio (times)

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.9641	0.9254
2	2005/2006	0.8338	0.9247
3	2006/2007	0.8774	0.9466
4	2007/2008	1.0530	1.0860
5	2008/2009	1.0606	1.0069
Total		4.7889	4.8896
Mean		0.9578	0.9779
S.D.		0.0911	0.0624
C.V.		0.0952	0.0639

Source: Appendix 1 'A'

The above Table No.:4.1 shows that the current ratio of two commercial banks. It is calculated as per total mean, Standard deviation and coefficient of variation.

In an average, NIBL has maintained higher current ratio than Nabil, which states that liquidity position of NIBL is fair. The coefficient of variation between the current ratio of Nabil is 0.0952 which is comparatively higher than 0.0639 of NIBL, it shows that current ratio of Nabil is less consistence than NIBL.

(ii) Cash and Bank Balance to Total Deposit Ratio (CBR Ratio)

Cash and bank balance is the most liquid asset. The ratio between the cash and bank balance and total deposit measure the ability of the bank to meet the unanticipated cash and all types of deposits.

We have,

$$\text{Cash and bank balance to total deposit ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

Where,

Cash and bank balance includes cash on hand, foreign cash on hand, cheques and other cash items, balance with domestic and abroad banks where as the total deposits include current deposits, saving deposits, fixed deposits, money at call and short term notice and other deposits.

Table No: 4.2

Cash and bank balance to total deposit ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.0383	0.0997
2	2005/2006	0.0326	0.1234
3	2006/2007	0.0600	0.0997
4	2007/2008	0.0837	0.0109
5	2008/2009	0.0090	0.0167
Total		0.2236	0.3504
Mean		0.0447	0.0701
S.D.		0.0253	0.0469
C.V		0.5660	0.6691

Source: Appendix 1 'B'

The Table No.:4.2 shows that the total mean, standard deviation and coefficient of variation of cash and bank balance to total deposit ratio of two commercial banks.

Figure in the table shows that the ratio (CBR) of Nabil is decreasing trend from FY 2004/05 to 2008/09. But trend is increasing scale in the F.Y. 2008/09. NIBL has also decreasing trend from 11.69 (in 2002/03) to .0940 (in 2004/05). And after that in F.Y.2005/06 it has been increased and decreased in F.Y. 2006/07.

Mean and standard deviation ratio of Nabil are less than that of NIBL. C.V. of Nabil and NIBL are 0.5660 and 0.6691 respectively. From the above analysis it can be concluded that Nabil bank has better maintenance of its tight liquidity than that of NIBL. Because more liquidity indicate the inability of the bank. Nabil bank is more riskier than NIBL because the C.V. of Nabil is greater than NIBL.

(iii) Cash and Bank Balance to Current Asset Ratio

This ratio shows the banks liquidity capacity on the basis of cash and bank balance that is the most liquid asset. So this ratio visualizes higher liquidity position than current ratio.

We have,

$$\text{Cash and bank balance to current assets ratio} = \frac{\text{Cash and Bank balance}}{\text{Current assets}}$$

Where,

Cash and bank balance represent total of local currency, foreign currencies, cheques in hand and various bank balances in local as well as foreign banks where as the current assets consists of cash and bank balance, money at call, short term notice, loan and advances, investment in government securities and other interest receivable and others miscellaneous current assets.

Table No.: 4.3

Cash and bank balance to current asset ratio

S. No.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.0374	0.0960
2	2005/2006	0.0370	0.1305
3	2006/2007	0.0633	0.1035
4	2007/2008	0.0731	0.0984
5	2008/2009	0.0784	0.1518
	Total	0.2892	0.5802
	Mean	0.0578	0.1160
	S.D.	0.0173	0.0224
	C.V.	0.2997	0.1928

Source: Appendix 1 'C'

Table No.: 4.3 show the total mean, standard deviation and C.V. of cash and bank balance to current assets ratio of commercial banks. Current asset ratio of two banks is better as they show the ability to manage the deposit withdrawals from the customers.

The above table shows that cash and bank balance to current assets ratio of Nabil bank decreasing trend. It has range from 0.0825 (in FY 2004/05) to 0.0370 (in FY 2005/06) and increased in F.Y. 2008/09. NIBL has fluctuating trend, it has range from 0.1305 (in FY 2005/06) to 0.0960 (in FY 2004/05).

From the above analysis we can conclude that liquidity position (only cash and bank balance) of Nabil bank is lesser than NIBL. But NIBL has higher consistency. Liquidity position of NIBL is less riskier than Nabil, because the C.V. of NIBL is less than Nabil.

(iv) Investment on Government Security to Current Assets Ratio

The government securities are not so much liquid as cash and bank balance. But they can easily sell in the market or they can be converted into cash in other ways.

Investment on government securities includes treasury bills and development bonds etc.

We have,

Investment on government securities current assets ratio

$$= \frac{\text{Investment on government securities}}{\text{Current Assets}}$$

Table No.: 4.4

Investment on government securities to current assets ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.1612	0.1395
2	2005/2006	0.0717	0.1409
3	2006/2007	0.1848	0.1381
4	2007/2008	0.1272	0.0827
5	2008/2009	0.0858	0.0485
	Total	0.6307	0.5497
	Mean	0.1261	0.1099
	S.D.	0.0436	0.2354
	C.V.	0.3457	0.0131

Source: Appendix 1 'D'

Table No.: 4.4 show the total mean, standard deviation and coefficient of variation of investment on government securities to current assets ratio of commercial banks.

Figure in the table shows that investment on government securities to current assets ratio of both Nabil and NIBL has in fluctuating trend and there is no consistency.

In overall, the mean ratio of investment on government securities to current assets of Nabil is higher than that of NIBL i.e. $0.1261 > 0.1099$. On the other hand coefficient of variation of Nabil is also higher than other NIBL i.e. $0.3457 > 0.0131$.

It can be concluded that Nabil uses to invest its current asset in government securities more than NIBL and the investment is quite stable too than that of NIBL bank.

(v) Loan and Advances to Current Assets Ratio

To make a high profit mobilizing its fund in the best way, a commercial bank should not keep its all collected funds as cash and bank balance but they should be invested as loan and advances to the customers. In the present study loan & advances represent to local and foreign bills discounted and purchased and loans, cash credit and overdraft in local currency as well as inconvertible foreign currency.

We have,

$$\text{Loan and advances to current assets ratio} = \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

Table No.: 4.5
Loan & advances to current assets ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.7071	0.7250
2	2005/2006	0.7577	0.7135
3	2006/2007	0.7032	0.7330
4	2007/2008	0.5956	0.7215
5	2008/2009	0.6480	0.7062
	Total	3.4116	3.5992
	Mean	0.6823	0.7198
	S.D.	0.0558	0.0119
	C.V.	0.0818	0.0166

Source: Appendix 1 ‘E’

Table No.: 4.5 show the total mean, standard deviation and coefficient of variation of loan & advances to current assets ratio of commercial banks. Through this table loan & advances to current assets ratios of the sample CBS are analyzed.

In case of Nabil loans and advances to current asset ratios are in increasing trend up to F.Y.2005/06 and in F.Y.2006/07 it has been decreased. Similarly NIBL ratios is also in increasing trend but in F.Y.2005/06 it has been decreased.

Mean value of this ratio of Nabil bank is 68.23%, which is less than that of NIBL (i.e. $0.6823 < 0.7198$). So coefficient of variation is also less than NIBL.

This analysis shows that Nabil use to provide high loan & advances in comparison of NIBL. Its trend of providing loan & advances is higher consistency than NIBL.

4.1.2 Asset Management Ratios (Activity Ratio)

Asset management ratio measures the efficiency of the bank to manage its asset in profitable and satisfactory manner. They indicate the speed with which assets are being converted. Thus these ratios are used to measure the banks ability to utilize their available resources.

Under this asset management ratio following ratios are studied.

(i) Loan & Advances to Total Deposit Ratio

It shows the relationship between loans & advances to total deposit. The ratio measures the extent to which the banks are successful to mobilize their total deposit on loan & advances.

We have,

$$\text{Loan \& advances to total deposit ratio} = \frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

Where,

Loan & advances include loans, advances, cash credit, local and foreign bill purchased and discount. Total deposits include saving, fixed current call at short deposit and others.

Table No.:4.6

Loan & advances to total deposit ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.7505	0.7104
2	2005/2006	0.6864	0.6750
3	2006/2007	0.6813	0.7059
4	2007/2008	0.6818	0.7989
5	2008/2009	0.7497	0.7886
	Total	3.5497	3.6788
	Mean	0.7099	0.7358
	S.D.	0.0367	0.0484
	C.V.	0.0518	0.0658

Source: Appendix 2 'A'

Table No.:4.6 show the total mean, S.D. and C.V. of loan & advances to total deposit ratio of commercial banks. Contents of the table show the percentage of loan & advances to total deposit ratio position of Nabil and NIBL.

The above table exhibits that the ratio of Nabil has increasing trend in up to FY 2005/2006 and in decreasing trend. NIBL has fluctuating trend i.e. highest in the FY 2007/2008 and lowest in FY 2005/2006.

The mean value of NIBL is highest than that of Nabil. Mean ratio of Nabil and NIBL is 0.7099 & 0.7358. Coefficient of variation of Nabil is lower than that of NIBL i.e. $0.0518 < 0.0658$.

From the above table it shows that Nabil has strong position regarding the mobilization of total deposit on loans and advances and acquiring high profit in comparison. But only higher ratio is not better from the point of view of liquidity as the loans and advances are not as liquid as cash and bank balance. On the other hand Nabil has less C.V. than NIBL, which indicate that loans and advances of Nabil are stable and consistent than that of NIBL.

(ii) Total Investment to Total Deposit Ratio

A commercial bank mobilizes its deposit by investing its fund in different securities issued by government and other financial or non-financial companies. This ratio measures the extent to which the banks are able to mobilize their deposit on investment in various securities.

We have,

$$\text{Total investment to total deposit ratio} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

Where,

Total investment consists investment on government securities, investment on debenture and bonds, share in subsidiary companies, shares in other companies and other investment.

Table No.:4.7

Total investment to total deposit ratio

S.No.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.2925	0.2760
2	2005/2006	0.3193	0.2960
3	2006/2007	0.3822	0.2657
4	2007/2008	0.3114	0.1995
5	2008/2009	0.2899	0.1584
	Total	1.5953	1.1956
	Mean	0.3191	0.2391
	S.D.	0.0331	0.0027
	C.V.	0.1037	0.0112

Source: Appendix 2 'B'

Table No.: 4.7 show the total mean, standard deviation & coefficient of variation of total investment to total deposit ratio of commercial banks.

The above total reveals that Nabil has increasing trend in F.Y 2004/2005 to 2005/2006 and in FY 2007/2008 it has follows decreasing trend. NIBL has fluctuating trend i.e. 0.2760 (in FY 2004/2005), 0.2960 (in FY 2005/2006), 0.2657 (in FY2006/2007), 0.1995 (in FY 2007/2008), and 0.1584 (in FY 2008/2009).

The mean value of Nabil is higher than that of NIBL i.e. Nabil =0.3191>NIBL=0.2391. Coefficient of variation of Nabil is higher than that of NIBL i.e. 0.1037>0.0112.

From the analysis of above table it is clear that Nabil has success to better utilization of deposit to investment than NIBL and also NIBL has higher consistency to investment in securities than other bank. Its investment policy is better.

(iii) Loan and Advances to Total Working Fund Ratio

The commercial bank must be very careful in mobilizing its total asset as loan & advances in appropriate level to generate profit. This ratio reflects the extent to which the commercial banks are success in mobilizing their assets on loan & advances for the purpose of income generating. A high ratio indicates better in mobilization of funds as loan and advances and vice versa.

We have,

$$\text{Loan and Advances to Working Fund Ratio} = \frac{\text{Loan and Advances}}{\text{Working Fund Ratio}}$$

Where, Total working fund consist current assets, net fixed assets, loan for development banks and other miscellaneous assets

Table No.: 4.8

Loan and advances to total working fund ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.6238	0.6222
2	2005/2006	0.5853	0.5990
3	2006/2007	0.5766	0.6265
4	2007/2008	0.5798	0.7073
5	2008/2009	0.6323	0.6951
	Total	2.9978	3.2501
	Mean	0.5681	0.6500
	S.D.	0.0211	0.0433
	C.V	0.3709	0.0666

Source: Appendix 2 'C'

Table No.: 4.8 show the total mean, standard deviation and coefficient of variation of loan and advances to total working fund ratio of commercial banks.

The above table shows that the loan and advances to total working fund ratio of Nabil has increasing trend up to FY 2004/2005 decreasing trend after that. NIBL has fluctuating trend i.e. highest in the FY 2007/2008 (0.7073) and lowest in F.Y. 2005/2006 (0.5990).

Mean value of Nabil is lesser than that of NIBL (i.e. $0.5681 < 0.6500$). And coefficient of variation of Nabil is highest than that of NIBL.

From the above analysis it can be conclude that Nabil has success to better mobilization of funds as loan & advances for the purpose of income generation. Nabil has mobilizing its fund is higher and it has higher consistency than that of NIBL.

(iv) Investment on Government Securities to Total Working Fund Ratio

To some extend commercial bank seems to utilize its fund by purchasing government securities. Government securities are a safe medium of investment though it is not liquid as cash and bank balance. This ratio is very important to know

the extent to which the banks are successful in mobilizing their total fund on different type of government securities to maximize its income.

We have,

Investment on Govt. Securities to Total Working Fund Ratio

$$= \frac{\text{Interest on Govt. Securities}}{\text{Working Fund Ratio}}$$

Where,

Investment on government securities includes treasury bills and development bonds etc.

Table No.: 4.9

Investment on government securities to total working fund ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/05	0.1375	0.1197
2	2005/06	0.1014	0.1183
3	2006/07	0.1741	0.1180
4	2007/08	0.1238	0.0811
5	2008/09	0.0839	0.0478
	Total	0.6207	0.4849
	Mean	0.1496	0.0970
	S.D.	0.0060	0.0008
	C.V.	0.0402	0.0084

Source: Appendix 2 'D'

Table No.:4.9 show the total mean, standard deviation and coefficient of variation of Investment on government securities to total working fund ratio of commercial banks.

Mean ratio of Nabil has higher than that of NIBL i.e. $0.1496 > 0.0970$. Similarly coefficients of variation of Nabil and NIBL are 0.0402 & 0.0084.

From the above table we found that Nabil has higher mean ratio of investment on government securities. It indicates that Nabil has success to better mobilizing of

funds as investment on government securities. Nabil's investment policy is also consistency than NIBL. But in the case of NIBL, it has least investment on government securities and investment policy is high consistency.

(v) Investment on Shares and Debenture to Total Working Fund Ratio

There has been two types of investment i.e., investment on government securities and investment on shares & debenture. Investment on shares and debentures to total working fund ratio reflects the extent on which the banks are successful to mobilize their total assets on purchase of shares and debentures of other companies to generate incomes and utilize their excess fund.

We have,

Investment on Shares & Debentures to Total Working Fund Ratio

$$= \frac{\text{Investment on Shares and Debentures}}{\text{Working Fund Ratio}}$$

Where,

Investment on shares and debentures includes investment on debentures bonds and share of the other companies.

Table No.: 4.10

Investment on shares and Debentures to total working fund ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.0251	0.0011
2	2005/2006	0.0046	0.0008
3	2006/2007	0.0103	0.0013
4	2007/2008	0.0086	0.0009
5	2008/2009	0.0080	0.0010
	Total	0.0566	0.0051
	Mean	0.0085	0.0010
	S.D.	0.0287	0.0003
	C.V.	3.3750	2.6450

Source: Appendix 2 'E'

Table No.:4.10 show the total mean, standard deviation and coefficient of variation of investment on shares and debentures to total working fund ratio.

The above table shows that the investment on shares and debentures to total working fund ratio of Nabil has fluctuating trend. NIBL has also same trend. It has highest in the FY 2004/2005 (0.0251) and lowest ration in FY 2005/2006 (0.0046).

The mean value of Nabil and NIBL are 0.0085 & 0.0010. The S.D. of Nabil and Investment are 0.0287 and 0.0003 and C.V. 3.3750 and 2.6450.

The above analysis shows that Nabil has invested its funds in shares and a debenture in comparison of working fund is lesser than NIBL. We conclude that its investment in share and debentures seems to be not consistence.

4.1.3 Profitability Ratios

Profitability ratios are very helpful to measure the overall efficiency of operation of financial institutions. Here, profitability ratios are calculated and evaluated in terms of the relationship between net profit and assets. Higher the profit ratio shows that higher the efficiency of a bank. The following profitability ratios are taken into account under this heading.

(i) Return on Total Working Fund Ratio

This ratio measures the profit earning capacity by utilizing available resources i.e. total asset. Return will be higher if the banks working fund is well managed and efficiently utilized. Maximizing taxes within the legal options available will also improve the return.

We have,

$$\text{Return on Total Working Fund Ratio} = \frac{\text{Net Profit}}{\text{Working Fund Ratio}}$$

Where,

Net profit includes the profit that is left to the internal equities after all costs, charge and expenses

Table No.: 4.11
Return on total working fund ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/05	0.0302	0.0143
2	2005/06	0.0284	0.0164
3	2006/07	0.0247	0.0182
4	2007/08	0.0199	0.0179
5	2008/09	0.0232	0.0170
	Total	0.1264	0.0838
	Mean	0.0253	0.0168
	S.D.	0.0035	0.0008
	C.V.	0.1397	0.0453

Source: Appendix 3 'A'

The above Table No.:4.11 show the total mean, standard deviation and coefficient of variation of return on total working fund ratio of commercial banks.

In above table return on total working fund ratio of Nabil has fluctuation trend. In case of NIBL it has also in fluctuation trend. Mean ratio of Nabil is higher than that of NIBL (i.e. 0.0253>0.0168). Similarly, C.V. and S.D of both banks has no positive and no negative value.

From the mean ratio analysis it is fund that Nabil bank has success to maintain the higher ratio in return on total working fund. The C.V. of Nabil is less than NIBL so; Nabil has higher consistency than NIBL.

(i) Return on Loan & Advances Ratio

It measures the earning capacity of a commercial banks on its deposits mobilized on loan & advances. Higher the ratio greater will be the return and vice versa.

We have

$$\text{Return on Loan \& Advances Ratio} = \frac{\text{Net Profit}}{\text{Loan and Advances}}$$

Where,

Loan & Advances includes loan cash credit, overdraft bills purchased and discounted.

Table No.:4.12
Return on loan & advances ratio

S.N.	Fiscal year	Nabil	NIBL
1	2004/2005	0.0490	0.0229
2	2005/2006	0.0492	0.0274
3	2006/2007	0.0434	0.0290
4	2007/2008	0.0342	0.0253
5	2008/2009	0.0368	0.0245
	Total	0.2126	0.1291
	Mean	0.0425	0.0258
	S.D.	0.0063	0.0024
	C.V.	0.1480	0.0923

Source: Appendix 3 'B'

The above Table No.: 4.12 shows the total mean, standard deviation and coefficient of variation of return on loan & advances ratio of commercial banks.

In the above table return on loan & advances ratio of Nabil bank has fluctuating trend. In case of NIBL it has increasing trend. Mean ratio of Nabil is greater than that of NIBL i.e. $0.0425 > 0.0258$. Similarly, coefficient of variation of Nabil is greater than NIBL i.e. $0.1480 > 0.0923$.

From above analysis it is found that Nabil bank has the comparatively higher return on loan than NIBL. It concludes that Nabil has success to earn high return on its loan & advances. It indicates that investment policy of Nabil has effective than NIBL. The C.V. ratio of Nabil is also lower; it shows that Nabil has consistency in return than NIBL.

(ii) Total Interest Earned to Total Outside Assets Ratio

It reflects that the extent to which the bank is successful to earn interest as major income on all the outside assets. Higher the ratio higher will be the earning power of total outside assets. This is very important ratio, as the main asset is the outside asset of a commercial bank.

We have,

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

Where,

Total outside assets includes loan & advances, investment on government securities, share and debentures and other all types of investment.

Table No.: 4.13

Total interest earned to total outside assets ratio

S.N.	Fiscal year	Nabil	NIBL
1	2004/05	0.0720	0.0631
2	2005/06	0.0686	0.0638
3	2006/07	0.0648	0.0666
4	2007/08	0.0738	0.0638
5	2008/09	0.0994	0.0739
	Total	0.3786	0.3312
	Mean	0.0757	0.0662
	S.D.	0.0124	0.0046
	C.V.	0.1632	0.0699

Source: Appendix 3 'C'

The above Table No.:4.13 show the total mean, standard deviation & coefficient of variation of total interest earned to total outside assets ratio of commercial banks.

The above table shows the ratio of total interest earned to total outside assets of Nabil and NIBL all have fluctuating trend. It has highest ratio i.e. 0.0994(in FY

2008/2009) & 0.0739(in FY 2008/2009) and lowest ratio 0.0648(in FY 2006/2007), 0.0631(in FY 2004/2005). Mean ratio of Nabil is higher than NIBL i.e. 0.0757>0.0662. Similarly, C.V. of Nabil is higher than NIBL i.e. 0.1632>0.0699

This shows that Nabil has better position with respect to the income earned from the total outside asset in comparison to NIBL.

(iii) Total Interest Earned to Total Working Fund Ratio

It reflects the extent to which the banks are successful in mobilizing their total assets to generate high income as interest. This ratio actually reveals the earning capacity of a commercial bank by mobilizing its working fund: A high ratio is indicator of high earning power of the bank on its total working fund and vice versa.

We have,

$$\text{Total Interest Earned to Total Working Fund Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

Table No.:4.14

Total interest earned to total working fund ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2005	0.0626	0.0545
2	2005/2006	0.0586	0.0550
3	2006/2007	0.0582	0.0574
4	2007/2008	0.0532	0.0564
5	2008/2009	0.0637	0.0617
	Total	0.2963	0.2850
	Mean	0.0596	0.0570
	S.D.	0.0052	0.0026
	C.V.	0.0087	0.0045

Source: Appendix 3 'D'

Table No.:4.14 shows the total mean, standard deviation & coefficient of variation of total interest earned to total working fund ratio of Nabil and NIBL.

The above table shows that the ratio of total interest earned to total working fund ratio of Nabil has fluctuating trend. It has highest ratio in F.Y.2008/09 (0.0637) and lowest in F.Y.2006/07 (0.0583). NIBL has in increasing trend. Mean ratio of Nabil bank has higher than NIBL (i.e. 0.0596>0.0570). Coefficient of variance of Nabil has highest than that of NIBL (i.e. 0.0087<0.0045).

From above analysis we can concluded that the ratio of total interest earned to total working fund ratio of Nabil bank is satisfactory in compared to NIBL. It means the total interest earned to total working fund ratio of the Nabil is stable and consistency in comparison to NIBL.

(iv) Total Interest Paid to Total Working Fund Ratio

Total interest paid to total working fund ratio measure the percentage of total interest paid against the total working fund. A high ratio indicates the higher interest expenses on total working fund and vice-versa.

We have,

$$\text{Total Interest Paid to Total Working Fund Ratio} = \frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

Where,

Total interest paid includes total expenses on deposit liabilities, loan & advances (borrowing) and other deposits.

Table No.:4.15

Total interest paid to total working fund ratio

S.N.	Fiscal year	Nabil	NIBL
1	2004/2005	0.0142	0.0218
2	2005/2006	0.0160	0.0230
3	2006/2007	0.0204	0.0248
4	2007/2008	0.0202	0.0255
5	2008/2009	0.0260	0.0318
	Total	0.0968	0.1269
	Mean	0.0194	0.0254
	S.D.	0.0039	0.0050
	C.V.	0.2010	0.9584

Source: Appendix 3 'E'

The Table No.: 4.15 shows that the total mean, standard deviation and coefficient of variance of total interest paid to total working fund ratio.

The above table shows that the total interest paid to total working fund ratio of Nabil has increase from FY 2007/2008 but it has decreasing trend before that. NIBL has fluctuating trend. It has highest in FY 2008/2009(0.0260) and lowest in FY 2004/2005(0.0142). If the mean ratios are observed, it is found that the Nabil bank has the lowest. The mean ratios of Nabil and NIBL have 0.0194 and 0.0254. It means Nabil has paid lower interest in comparison to NIBL. But the coefficient of variation of Nabil is less than that of NIBL (i.e. $0.2010 < 0.9584$). It indicates that the total interest paid to total working fund ratio of Nabil is less consistent than NIBL. It can be concluded that the position of Nabil is better than NIBL is as its ratio is always lower than NIBL. That means it is paying less interest against its working fund.

4.1.4 Risk Ratio

The possibility of risk makes banks investment a challenging task. Bank has to take risk to get return on investment. It increases effectiveness and profitability of the bank. If a bank expects high return on its investment it has to accept the risk and manage it efficiently.

Through following ratios, effort has been made to measure the level of risk.

(i) Liquidity Risk Ratio

The liquidity risk ratio measures the level of risk associated with the liquid assets i.e. cash, bank balance that are kept in the bank for the purpose of satisfying the depositor's demand for cash. Higher the ratio, lower the liquidity risks.

We have,

$$\text{Liquidity Risk Ratio} = \frac{\text{Total Cash \& Bank Balcne}}{\text{Total Deposit}}$$

Table No.: 4.16

Liquidity risk ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/05	0.0383	0.0940
2	2005/06	0.0326	0.1234
3	2006/07	0.0600	0.0997
4	2007/08	0.0837	0.1089
5	2008/09	0.0903	0.1696
Total		0.3049	0.5956
Mean		0.0610	0.1191
S.D.		0.0232	0.0272
C.V		0.3799	0.2285

Source: Appendix 4 'A'

The Table No.: 4.16 show the mean, standard deviation and coefficient of variation of liquidity risk ratio of commercial banks. Figure in the table shows the percentage of liquidity risk ratio of Nabil and NIBL.

In above table liquidity ratios of these two commercial banks are in fluctuating trend. Nabil has maintained a highest ratio of 0.0903 in the FY 2008/2009. Similarly, NIBL has maintained a highest ratio of 0.1656 in the FY i.e. 2008/2009.

If the mean ratios are observed Nabil has lesser than that of NIBL, i.e. 0.0610<0.1191. Which indicate that Nabil liquidity risk is higher than the NIBL But according to the coefficient of variation Nabil's ratio is higher than NIBL. It indicates that Nabil's liquidity is less consistency than NIBL.

(ii) Credit Risk Ratio

Credit risk ratio measures the possibility that loan will not be repaid or that investment will deteriorate in quality or go into default with consequent loss to the bank. Actually credit risk ratio shows the proportion of non-performing assets in total loan and advances of a bank.

We have,

$$\text{Credit Risk Ratio} = \frac{\text{Total Loan and Advances}}{\text{Total Assets}}$$

Table No.: 4.17

Credit risk ratio

S.N.	Fiscal year	Nabil	NIBL
1	2004/2005	0.6160	0.6222
2	2005/2006	0.5787	0.5990
3	2006/2007	0.5704	0.6250
4	2007/2008	0.0527	0.6986
5	2008/2009	0.0633	0.6871
	Total	1.8811	3.2319
	Mean	0.3762	0.6464
	S.D.	0.2603	0.0389
	C.V.	0.6920	0.0601

Source: Appendix 4 'B'

The above Table No.: 4.17 show that the total mean, standard deviation & coefficient of variation of credit risk ratio of commercial banks.

The above table shows that the credit risk ratios of these two commercial banks are fluctuating trend. Nabil has maintained a highest ratio of 0.6160 in FY

2004/2005. Similarly, NIBL has maintained a highest ratio of 0.6986 in FY 2007/2008.

Mean ratio of Nabil is lesser than NIBL (i.e. $0.3762 < 0.6464$). And C.V of Nabil is highest than that of NIBL. It indicates that Nabil has more consistency than NIBL.

(iii) Capital Risk Ratio

Capital ratio measures bank ability to attract deposits and inter bank funds. It also determine the level of profit, a bank can earn if a bank chooses to take high capital risk. The capital risk is directly related to return on equity.

We have,

$$\text{Capital Risk Ratio} = \frac{\text{Capital (Paid up capital + Re serves)}}{\text{Risk Weighted Assets}}$$

(Only loan and advances is taken as risk weighted assets)

Table No.: 4.18
Capital risk ratio

S.N.	Fiscal Year	Nabil	NIBL
1	2004/2009	0.1566	0.1165
2	2005/2008	0.1451	0.1108
3	2006/2007	0.1323	0.1086
4	2007/2008	0.0961	0.1146
5	2008/2009	0.0916	0.1133
	Total	0.6217	0.5638
	Mean	0.1243	0.1128
	S.D.	0.0263	0.0518
	C.V.	0.2115	0.4588

Source: Appendix 4 'C'

The Table No.: 4.18 show the mean, standard deviation & coefficient of variance of capital risk ratio of commercial banks.

If the mean ratios are observed Nabil's ratio is higher than NIBL but. Similarly, coefficient of variation is lower than that of NIBL i.e. $0.2115 < 0.4588$. It is concluded that the NIBL bank is more stable than the Nabil and it is also more consistency than Nabil.

4.2 Statistical Tools

Some important statistical tools are used to achieve the objectives of this study. In this study, statistical tools such as, trend analysis, co-efficient of correlation analysis between different variables, test of hypothesis are used.

4.2.1 Trend Analysis

Under this topic, analysis trend of loan & advances to total deposit ratio as well as trend of total investment to total deposit ratios of Nabil and NIBL bank are calculated and forecasted for next five years. The forecast is based on the following assumptions.

- a. The first assumption is that other things will remain unchanged.
- b. The bank will run in present potion.
- c. The economy will remain in the present stage
- d. The forecast will be true only when the limitation of least square method is carried out
- e. Nepal Rastra Bank will not change its guidelines to commercial banks.

(i) Trend analysis of loan and advances to total deposits ratio of Nabil and NIBL.

Calculation of the trend values of loan and advances to total deposits ratio of Nabil and NIBL for 5 years from 2002/2003 to 2006/2007 and forecast for next 5 years from 2007/2008 to 2011/2012. The following Table No.: 4.19.

Table No.:4.19

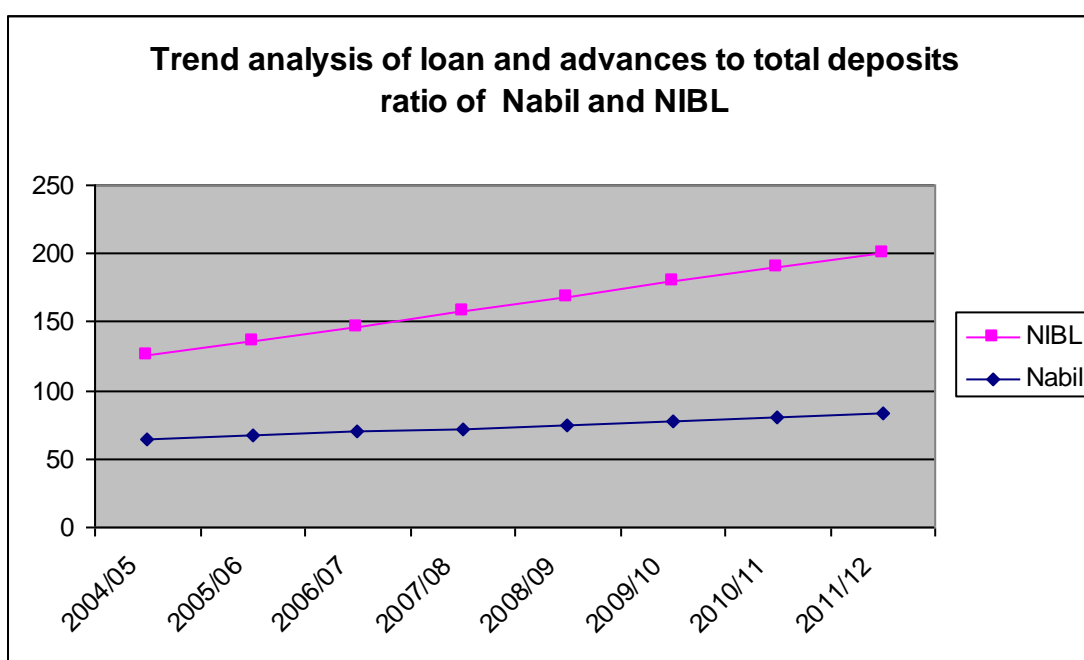
**Trend analysis of loan and advances to total deposits ratio of
Nabil and NIBL**

S.N.	Fiscal Year	Nabil	NIBL
1	2004/05	64.33	60.69
2	2005/06	66.99	68.88
3	2006/07	69.65	77.07
4	2007/08	72.31	85.26
5	2008/09	74.97	93.44
6	2009/10	77.63	101.63
7	2010/11	80.29	109.82
8	2011/12	82.95	118.01

Source: Appendix 6 "A" & "B"

The calculated and projected trend values of loan and advances of Nabil and NIBL is fitted in the following trend line.

Figure 4.1



From the above Table No.: 4.19 it has been shown that the ratio of loan & advances to total deposits of Nabil and NIBL bank are in increasing trend. If our assumption are applied the ratio of loan & advances to total deposits of Nabil in 2011/2012 will be 82.95% which is the lowest than NIBL (i.e.118.01%).

From above trend analysis it is quite obvious that Nabil deposit utilization position in relation to loan & advances to total deposit ratio is lower than NIBL but it has increasing trend. NIBL has increasing trend ratio and reached to 118.01% at the end of the projected year. These increasing trend means NIBL may use relatively large portion of their deposit by providing loan. It is also found that the loan and advances position of NIBL will be in better position in future.

(ii) Trend analysis of total investment to total deposit ratio of Nabil and NIBL

The calculation of the trend values of total investment to total deposits ratio of Nabil and NIBL for 5 years from 2004/2005 to 2008/2009 and forecast for next 5 years from 2007/2008 to 2011/2012 in the following Table No.: 4.20.

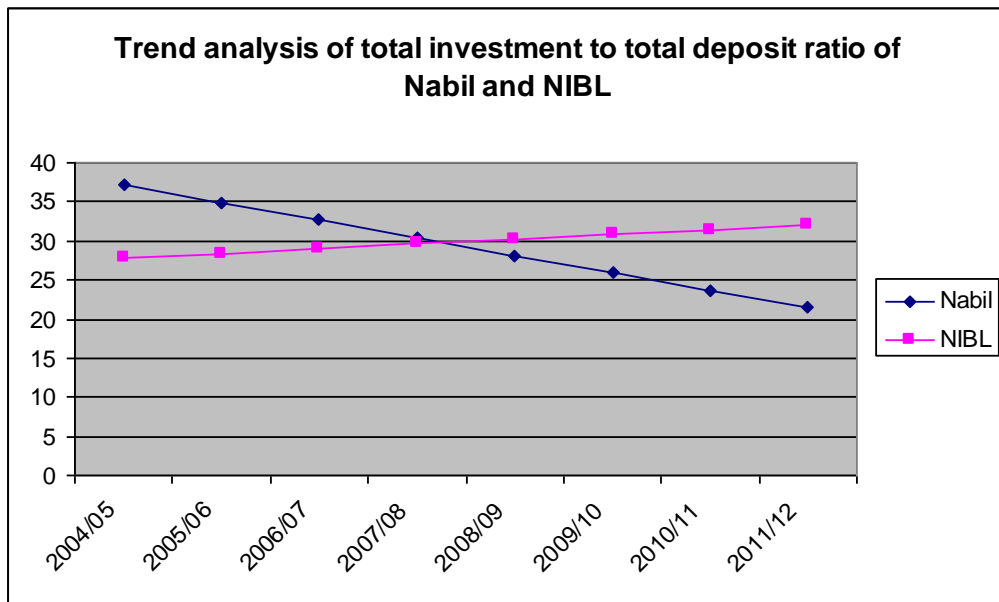
Table No.: 4.20
Trend analysis of total investment to total deposit ratio of
Nabil and NIBL

S.N.	Fiscal Year	Nabil	NIBL
1	2004/05	37.14	27.76
2	2005/06	34.89	28.38
3	2006/07	32.65	29.00
4	2007/08	30.40	29.61
5	2008/09	28.16	30.23
6	2009/10	25.91	30.85
7	2010/11	23.67	31.46
8	2011/12	21.42	32.08

Source: Appendix 6 "C" & "D"

The calculated and projected trend values of total investment to total deposits of Nabil and NIBL is fitted in the following trend line.

Figure 4.2



The above Figure 4.2 shows that the ratio of total investment to total deposit ratio of Nabil is in decreasing and NIBL is in increasing trend. If our assumption is applied the ratio of total investment to total deposit of Nabil in 2011/2012 will be 21.42%, which is lower than NIBL. Similarly ratio of NIBL in 2011/2012 will be 32.08%.

From the above analysis it can be concluded that Nabil's decreasing trend ratio is 2.25. However, NIBL has increasing ratio i.e.0.62. It means Nabil may use relatively low portion of deposit towards investment in different sectors. Above analysis also reveals that Nabil and NIBL is uses the skill and attention towards the potential sector of the investment.

From above trend chart it is found that Nabil has unfavorable condition than and NIBL for utilizing the total deposit towards investment.

4.2.2 Coefficient of Correlation Analysis

Under this topic, Karl person's coefficient of correlation is used to find out the relationship between deposit and loan & advances.

Co-efficient of correlation between deposits and loan & advances

Coefficient of correlation(r) between deposits and loans and advances measures the degree of relationship between these two variables. The purpose of correlation analysis between deposit and loan and advances is to find out whether deposit is significantly used as loan and advances. In this analysis deposit is independent variables (x) and loan & advances are dependent variables (y).

Table No.: 4.21

Coefficient of correlation between deposit and loan & advances

Evaluation criteria	Nabil	NIBL
R	0.9905	0.9811
r^2	0.9811	0.9956
P.E.(r)	0.0057	0.0013

Source: Appendix 7

From the above Table No.:4.21 show that r , r^2 , P.Er. Between deposit and loan and advances of Nabil and NIBL for the period of 2004/2005 to 2008/2009.

From the above table it is found that the co-efficient of correlation (r) between deposit and loan and advances of Nabil and NIBL is 0.9905 & 0.9811. It shows that there is very high positive relationship between these two variables for Nabil and NIBL. But the degree of relationship between deposit and loan & advances of Nabil is greater than that of NIBL are 0.9905 and 0.9811 respectively. Therefore, only 98% and 100% dependent variable has been explained by the independent variable for Nabil and NIBL respectively.

From above analysis it can be conclude that the value of r is highly significant that means there is significant relationship between deposit and loan & advances of Nabil & NIBL. It also reveals that two banks are successful in mobilizing their deposits and loan & advances.

4.2.3 Test of Hypothesis

It is an assumption about the population, which may or may not be true, to determine whether it is true or not by taking some sample with followed some procedure is called testing of hypothesis. The test of hypothesis discloses the fact whether the difference between the computed statistic and hypothetical parameter is significant.

Test of hypothesis on loan and advances to total deposit ratios between Nabil and NIBL Here, mean ratio of loan and advances to total deposit of Nabil and NIBL are taken and carried out under t-test of significance difference.

Table No.: 4.22

Test of hypothesis on loan and advances to total deposit ratios between Nabil and NIBL.

S.N.	Nabil	NIBL
1	$\sum X_1=349.11$	$\sum X_2=367.88$
2	$\bar{X}_1=69.82$	$\bar{X}_2=73.58$
3	$\sum X_1^2=56.32$	$\sum X_2^2=120.21$

Source: Appendix 8

> **Test of significance of difference between the mean ratio of loan & advance to Nabil and NIBL.**

Setting of hypothesis,

Null hypothesis (**H₀**): $\bar{X}_1 = \bar{X}_2$

i.e., there is no significant difference between mean ratios of loan & advances to total deposit of Nabil and NIBL.

Attractive hypothesis (**H₁**): $\bar{X}_1 \neq \bar{X}_2$ (**two tailed test**)

i.e., there is significant difference between mean ratios of loans & advances to total deposit of Nabil & NIBL.

The test statistics under H_0 is given by:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{S^2 \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

Where,

$$\begin{aligned} S^2 &= \frac{1}{n_1 + n_2 - 2} (\sum X_1^2 + \sum X_2^2) \\ &= \frac{1}{5 + 5 - 2} (56.32 + 120.21) \\ &= 22.07 \end{aligned}$$

Now,

$$\begin{aligned} t &= \frac{69.82 - 73.58}{\sqrt{22.07 \left(\frac{1}{5} + \frac{1}{5} \right)}} \\ &= 0.43 \end{aligned}$$

The calculated value of 't' = 0.43

Tabulated value of 't' (two-tailed test) at 5% level of $(n_1 + n_2 - 2)$ d.f. i.e. 8 d.f. is 2.306.

Decision: -

Since the calculated value of 't' (i.e. 0.43) is less than its tabulated value (i.e. 2.306). So, null hypothesis is accepted at 5% level of significance i.e. there is no significant difference between mean ratios of loan & advances to total deposit of Nabil & NIBL.

4.3 Major Findings of the Study

The main findings of the study are derived on the basis of analysis of financial data of Nabil and NIBL are given below.

1. Liquidity ratio

The liquidity position of Nabil and NIBL reveals that:

- From the analysis of current ratio, it is found that the mean ratio of Nabil is lower than NIBL, it means Nabil has maintained lower current ratio in compared to NIBL. The ratio of Nabil is less variable than NIBL.
- The mean ratio of cash and bank balance to total deposits of Nabil is less than NIBL. It states that the liquidity position of Nabil is not better than that NIBL. Nabil bank has better to maintain of its liquidity position.
- The mean ratio of cash and bank balance to current assets ratio of Nabil is lesser than NIBL. But Nabil has higher consistency than that of NIBL. It states that the Nabil has utilized its funds more efficiently.
- The mean ratio of NIBL on government securities to current asset of Nabil is higher than NIBL. It states that the Nabil uses to invest its current asset in government securities more than NIBL.
- The mean ratio of loan & advances to current assets of Nabil is higher than NIBL. It reveals that Nabil use to provide high loan & advances in comparison to NIBL.

The above result shows that the liquidity position of Nabil is comparatively lower than NIBL. It has the lower cash and bank balance to total deposit and cash and bank balance to current assets ratio. It has the highest loan & advances to current assets and investment on government securities to current assets ratio.

2. Asset management ratio

The assets management ratio of Nabil & NBIL shows that;

- The mean ratio of loan & advances to total deposit of Nabil is higher than NIBL. But Nabil has less C.V. than that NIBL, it indicates that loans and advances of Nabil is stable and consistent.
- The mean ratio of total investment to total deposit of Nabil is higher than NIBL. It can be concluded that Nabil is success to better utilization of deposit to investment.

- The mean ratio of loan & advances to working fund ratio of Nabil is higher than & NIBL. It can be concluded that Nabil has mobilizing its fund higher.
- In case of Investment on government securities to total working fund ratio, Nabil has higher mean ratio than NIBL. It concludes the Nabil's investment policy is more variable and consistency than NIBL.
- The mean ratio of investment on shares and debentures to total working fund of Nabil is higher than & NIBL. But its investment in shares and debentures seems to be consistent than NIBL.

From the above analysis, it can be conclude that Nabil has highest investment policy towards investment to total deposits, government securities to total working fund, shares and debentures to total working funds. And Nabil has stable and consistent than NIBL.

3. Profitability ratio

From the analysis of profitability ratio of Nabil and NIBL it shows that;

- The mean ratio of return on total working fund ratio of Nabil is higher than NIBL and it is more consistent. It can be conclude that Nabil has success to maintain the high ratio in return on total working fund.
- The mean ratio of return and loan & advances is comparatively higher than NIBL. The variability of the ratio of Nabil is higher and it is also consistency in return.
- The mean ratio of total interest earned to total outside assets of Nabil is greater than NIBL. It indicated the Nabil has average position towards income earned from total outside asset in comparison NIBL.
- The mean ratio of total investment earned to total working fund of Nabil is also greater than NIBL.
- The mean ratio of total interest paid to total working fund of Nabil is lower than NIBL. It means Nabil has paid lower interest than NIBL.

From the above findings, it can be said that Nabil has higher profitable in comparison to NIBL. To earn high profit in future the bank must maintain its high profit margin.

4. Risk ratio

The risk ratios of Nabil and NIBL reveal that;

- The mean ratio of liquidity risk of Nabil is lower than NIBL. The ratio of Nabil is less consistent than Investment.
- The mean ratio of credit risk of Nabil is also higher than NIBL. The credit risk ratio of Nabil is more variable in comparison to NIBL.
- Nabil has maintained higher mean ratio of capital risk than NIBL. The ratio of Nabil is more consistent than NIBL.

From the above findings, it can be concluded that Nabil has average risk ratio. The bank should maintain risk against liquidity fund to earn high profit.

5. Trend analysis and projection for next years.

The trend analysis and projection for next five years of Nabil and NIBL reveals that;

- The trend analysis of loan and advances to total deposits ratio of Nabil & Investment bank have increasing trend. Nabil's increasing trend ratio is 2.66, which is lowest than NIBL's increasing trend ratio 8.19. The increasing trend of NIBL's reveals that it will be better position in future.
- The trend analysis of total investment of total deposit ratio of Nabil is in decreasing trend but NIBL has increasing trend ratio in 0.62. The increasing trend ratio of NIBL's reveals that it has better condition for utilizing the total deposit towards investment.

From the above findings, it can be concluded that Nabil may use relatively large portion of their deposit into providing loan and towards the potential sector of the investment. It shows the NIBL's position will be better in near future in comparison to Nabil.

6. Co-efficient of correlation analysis

Co-efficient of correlation analysis between different variables of Nabil and NIBL shows that;

- Co-efficient of correlation between deposit and loan & advances of Nabil & NIBL is positive relationship between these variables. Nabil has the lowest value of co-efficient of correlation between deposit and loan & advances than NIBL. This indicated Nabil position is not better in mobilization of deposit as loan & advances in compared to NIBL.

From above findings, it can be concluded that there is significant relationship between deposit and loan & advances of NIBL.

7. Test of hypothesis

By analyzing the test of significance difference of regarding the parameter of the population, it has been found that;

- There is no significant difference between mean ratios of loan & advances to total deposits of Nabil & NIBL.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

The last chapter of this study is summary; conclusion and recommendations which have discussed and explored the facts and matters required for various parts of the study. Through the analytical chapter by using some important financial as well as statistical tools, makes a comparative analysis of various aspects of the investment of concern commercial banks.

Having completed the basic analysis required for the study, the researcher must point out the mistakes and errors and also correct them by giving suitable suggestions for further improvement. Since researcher has the banking experience of about four years which also includes working in the 'Assets Liability Management Committee (ALCO)' of commercial bank, the recommendations prescribed here which will have more practical touch. Therefore, this summarized and recommended tasks of the researcher of the study would be meaningful to the top management of the bank to initiate the action and achieve the desired result.

5.1 Summary and Conclusion

The economic development of a country depends upon the development of commerce and industry and there is no doubt that banking promotes the development of commerce because banking itself is the part of commerce. The process of economic development depends upon various factors, however economists are now convinced that capital formation and its proper utilization plays a paramount role for rapid economic development.

The economic growth was very slow in earlier years. It has caught its full swing with the restoration democracy in the country. At present, overall economic growth rate still decline year by year. Reasons behind this decline are insecure situation faced by industry, decrease in the tourist arrival, drop in the production and export of carpet, garment and pashmina industry and political situation.

The evolution of the organized financial system in Nepal has more recent history than in other countries of the world. In Nepalese context, the history of

banking is not more than six decades. After the announcement of liberal and free market economic based policy, Nepalese banks and financial sectors have greater network and access to national and international markets. Commercial banks play a vital role which deals with other people's money and stimulate saving by mobilizing idle resources to those sectors having investment opportunities. Modern bank provides various services to their customers in view of facilitating their economic and social life.

The objective of the commercial banks is always to earn more profit by investing or granting loan and advances into profitable, secured and marketable sector. But commercial bank should be careful while performing the credit creation function; the banks should never invest its funds in those securities, which are too much fluctuating. Commercial banks must follow the rules and regulations as well as different directions issued by central bank and ministry of finance while mobilization the funds or the commercial banks should invest its funds only those securities, which are legal.

There has been number of commercial banks established, the research has taken into consideration the following two commercial banks:

'Nabil Bank Ltd' – Nabil Bank Limited was the first joint venture commercial bank incorporated in 1984 by joint investment of Dubai Bank Limited and Nepali promoters. This bank is awarded by "Bank of Year" of the year 2004 by the international banking magazine "The Banker"

'Nepal Investment Bank Ltd' – Nepal Investment Bank Limited was the third joint venture bank established in 1986 under the Companies Act 1964 (now Companies Ordinance 2062) by joint investment of Banque Indosues of France and Nepali promoters. This bank is awarded by "Bank of Year" of the year 2003, 2005 and again in 2008 by the international banking magazine "The Banker".

In the study, the word 'investment' covers a wide range of activities like investment of income, savings or other collected fund. If there is no savings, there is no existence of investment therefore, savings and investment are interrelated. Investment policy is a one facet of the overall spectrum of policies that guide banks'

investment operations and it ensures efficient allocation of funds to achieve the sustainable economic development of the nation. A sound and viable investment policy attracts both borrowers and lenders, which helps to increase the volumes and quality of deposits, loan and investment. Therefore, the investment policy should be carefully analyzed.

Some sources of funds for the investment of the bank are capital, general reserves, accumulated profit, deposits and external & internal borrowings. Similarly, some important banking terms, which are frequently used in this study, are loan and advances, investment on government securities, shares and debentures, deposits and other use of funds.

In this study, for the analysis and interpretation of the data different financial & statistical tools are used. In the financial tools liquidity ratios, assets management ratios, profitability ratios and risk ratios have been used, where as in statistical tools mean, standard deviation, coefficient of variation, trend analysis, coefficient of correlation and test of hypothesis (i.e. t-test) have been used. Only the secondary data have been used for the analysis in this research. The data are obtained from annual reports of concerned banks, likewise, the financial statement of five years i.e. 2004/2005 to 2008/2009 was selected for the purpose evaluation.

The liquidity position of Nabil is comparatively lower than NIBL but it has the highest investment on government securities to current assets ratio.

Through the assets management ratio, Nabil has highest investment policy towards investment to total deposits and government securities to total working fund but lower into shares and development to total working fund.

In analysis of profitability, return on total working fund and return on loan & advances, total interest earned to total outside assets and total interest earned to total working fund of Nabil is higher but total interest paid to total working fund of Nabil is lower.

From the viewpoint of risk ratio, liquidity risk is lower than NIBL but credit risk and capital risk of Nabil is higher than NIBL.

Through the both trend analysis i.e. loan & advances to total deposits and total investment of total deposit ratios of NIBL is greater than that of Nabil. It shows the NIBL's position will be better in future.

From the co-efficient of correlation between deposit and loan & advances there is a significant relationship.

Through the analysis and findings we can summarize that Nabil's investment policy is better in every sector and profitability ratio is also good, similarly trend of loan & advances to total deposits shows that NIBL's position will be better. However, liquidity position is not good but it has average risk ratio.

5.2 Recommendations

On the basis of analysis and findings of the two banks in previous section, they are recommended to go through following suggestion, which may overcome the weakness and less effectiveness of the existing fund mobilization and investment policy.

- A commercial bank must maintain its satisfactory liquidity position to meet the credit need of the customers; however, external as well as internal factors affect the liquidity position of banks. As Nabil has maintained the ratio of cash and bank balance to total deposits and current assts considerably lower than NIBL, Nabil is recommended to increase cash and bank balance to make the immediate payment to the depositor and to meet the demand of loan & advances.
- To get success in competitive banking environment and maximize return, depositors' money must be utilized as loan and advances. If the largest item of asset side is loan and advances it has negative implication over liquidity because loans and advance are less liquid than the investment in T-bills and development bonds but it will jeopardizes the profitability. Nabil's loan & advances to total deposit ratio and loan & advances to total working fund ratio is higher than NIBL. To overcome this situation, NIBL is strongly recommended to follow liberal lending policy and invest more and more percentage of total deposit and total working fund in loan & advances.

- Besides investing on government securities, Nabil is recommended to invest its fund in purchase of shares and debentures of other companies. Government securities such as treasury bills have very lower yield than other companies' securities. This also helps to maintain the sound portfolio of the bank.
- Profitability is the main indicator of the financial performance of every business organization. In this study, profitability ratio is good from the angle of return but it seems that Nabil cannot earn higher interest through the outside assets and working fund. So Nabil is recommended to increase its interest earned in outside assets and working fund by investing more & more funds in loan & advances and different types of securities. Because higher interest earning capacity of the bank implies better performance of the bank.
- If a bank expects high return on its investment it has to accept the risk, it increases effectiveness and profitability of the bank. The risk taken by Nabil, from the angle of capital risk is an average whereas liquidity risk and credit risk is lower than NIBL and its consistency are highly volatile which may result higher loss. The bank should not take high risk, Nabil should carefully analyze in above risk to achieve higher returns.
- In order to collection much funds, Nabil is suggested not to be surrounded and limited only big clients i.e. multinational companies, large industries, manufacturing companies, NGOs and INGOs etc. It should also cater the lower and middle level people too. Through different kind of scheme such as easy saving scheme, cumulative deposit scheme, house building deposit scheme, deposit linked life insurance scheme, recurring deposit scheme and many other the bank can collect a large fund from lower level people of the country.
- In the light of growing competition in the banking sector, the business of the bank should be customer oriented. The bank is recommended to adopt new technology and services such as SWIFT, ATM cards, visa electron debit card, international credit card, locker services, lending against gold and silver services, 24 hours services, holiday banking etc. The bank should involve in different kind of social and community development activities. The bank has been able to provide more personalized services and a better environment for its customer, it is an effective tool to attract and retain the customers.

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Appendix – 1

Liquidity Ratio

A. Current Ratio

Calculation of Current Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Total Current Assets	14971.80	17054.82	22107.02	36535	43206
Total Current Liabilities	15528.69	20454.97	25196.34	34695	40737
Ratio (Times)	0.9641	0.8338	0.8774	1.0530	1.0606
NIBL					
Total Current Assets	13967.78	17906.11	23582.11	38158.27	52144.97
Total Current Liabilities	15093.89	19364.70	24912.72	35136.52	48014.16
Ratio (Times)	0.9254	0.9247	0.9466	1.0860	1.0069

B. Cash and Bank Balance to Total Deposit Ratio

Calculation of Cash and Bank Balance to Total Deposit Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Cash & Bank Balance	559.38	630.24	1,399.83	2671	3372
Total Deposits	4586.61	19347.40	23342.29	31915	37348
Ratio(Times)	0.0383	0.0326	0.0600	0.0837	0.0090
NIBL					
Cash & Bank Balance	1340.49	2336.52	2441.51	3754.94	7918.00
Total Deposits	14254.57	18927.31	24488.86	34451.73	46698.1
Ratio (Times)	0.0940	0.1234	0.0997	0.0109	0.0167

C. Cash and Bank Balance to Current Assets Ratio

Calculation of Cash and Bank Balance to Current Assets Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Cash & Bank Balance	559.38	630.24	1399.83	2671	3372
Current Assets	14971.80	17054.8	22107.0	36535	43206
Ratio(Times)	0.0374	0.0370	0.0633	0.0731	0.0784
NIBL					
Cash & Bank Balance	1340.49	2336.52	2441.51	3754.94	7918.00
Current Assets	13967.78	17906.1	23582.1	38158.27	52144.97
Ratio (Times)	0.0960	0.1305	0.1035	0.0984	0.1518

D. Investment on Government Securities to Current Assets Ratio

Calculation of Investment on Government Securities to Current Assets Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Investment on Govt. Securities	2413.94	1222.47	4085.84	4647.00	3706.00
Current Assets	14971.80	17054.82	22107.02	36535	43206
Ratio (Times)	0.1612	0.0717	0.1848	0.1272	0.0858
NIBL					
Investment on Govt. Securities	1948.50	2522.30	3256.40	3155.00	2531.30
Current Assets	13967.78	17906.11	23582.11	38158.27	52144.97
Ratio (Times)	0.1395	0.1409	0.1381	0.0827	0.0485

E. Loan & Advances to Current Assets Ratio

Calculation of Loan & Advances to Current Assets Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Loan & Advances	10586.17	12922.54	15545.78	21759	27999
Current Assets	14971.80	17054.82	22107.02	36535	43206
Ratio (Times)	0.7071	0.7577	0.7032	0.5956	0.6480
NIBL					
Loan & Advances	10126.06	12776.21	17286.43	27529.31	36827.16
Current Assets	13967.78	17906.11	23582.11	38158.27	52144.97
Ratio (Times)	0.7250	0.7135	0.7330	0.7215	0.7062

Appendix – 2
Asset Management Ratio (Activity Ratio)

A. Loan & Advances to Total Deposit Ratio

Calculation of Loan & Advances to Total Deposit Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008 /09
NABIL					
Loan & Advances	10586.17	12922.54	15545.78	21759	27999
Total Deposit	14586.61	19347.40	23342.29	31915	37348
Ratio (Times)	0.7257	0.6679	0.6660	0.6818	0.7497
NIBL					
Loan & Advances	10126.06	12776.21	17286.43	27529.31	36827.16
Total Deposit	14254.57	18927.31	24488.86	34451.73	46698.10
Ratio (Times)	0.7104	0.6750	0.7059	0.7989	0.7886

B. Total Investment to Total Deposit Ratio

Calculation of Total Investment to Current Assets Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Total Investment	4267.23	6178.43	8945.31	9939	10826
Total Deposit	14586.61	19347.40	23342.29	31915	37348
Ratio (Times)	0.2925	0.3193	0.3832	0.3114	0.2899
NIBL					
Total Investment	3934.19	5602.87	6505.68	6874.00	7399.00
Total Deposit	14254.57	18927.31	24488.86	34451.73	46698.10
Ratio (Times)	0.2760	0.2960	0.2657	0.1995	0.1584

C. Loan & Advances to Working Fund Ratio

Calculation of Loan & Advances to Working Fund Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Loan & Advances	10586.17	12922.54	15545.78	21759	27999
Total Working Fund	17186.33	22329.97	27253.39	37526	44176
Ratio (Times)	0.6160	0.5787	0.5704	0.5798	0.6323
NBIL					
Loan & Advances	10126.06	12776.21	17286.43	27529.31	36827.16
Total Working Fund	16274.06	21330.14	27590.84	38922.91	52977.65
Ratio (Times)	0.6222	0.5990	0.6265	0.7073	0.6951

D. Investment on Government to Working Fund Ratio

Calculation of Investment on Government to Working Fund Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Investment on Govt. Securities	2413.94	1222.47	4085.84	4647	3706
Total Working Fund	17186.33	22329.97	27253.39	37526	44176
Ratio (Times)	0.1405	0.0547	0.1499	0.1238	0.0839
NIBL					
Investment on Govt. Securities	1948.50	2522.30	3256.40	3155.00	2531.30
Total Working Fund	16274.06	21330.14	27590.84	38922.91	52977.65
Ratio (Times)	0.1197	0.1183	0.1180	0.0811	0.0478

E. Investment on Shares and Debentures to Working Fund Ratio

Calculation of Investment on Shares and Debentures to Working Fund Ratio of
NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Investment on Shares & Debentures	440.28	104.20	286.96	322.72	353.41
Total Working Fund	17186.33	22329.97	27253.39	37526.00	44176.00
Ratio (Times)	0.0256	0.0047	0.0105	0.0086	0.0080
NIBL					
Investment on Shares & Debentures	17.74	17.74	35.25	35.25	52.76
Total Working Fund	16274.06	21330.14	27590.84	38922.91	52977.65
Ratio (Times)	0.0011	0.0008	0.0013	0.0009	0.0010

Appendix – 3

Profitability Ratio

A. Return on Total Working Fund Ratio

Calculation of Return on Working Fund Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Net Profit	518.64	635.26	673.96	746.00	1031.00
Total Working Fund	17186.33	22329.97	27253.39	37526.00	44276.00
Ratio (Times)	0.0302	0.0284	0.0247	0.0199	0.0232
NIBL					
Net Profit	232.15	350.54	501.40	696.72	900.62
Total Working Fund	16274.06	21330.14	27590.84	38922.91	52977.65
Ratio (Times)	0.0143	0.0164	0.0182	0.0179	0.0170

B. Return on Loan & Advances Ratio

Calculation of Return on Loan & Advances Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Net Profit	518.64	635.26	673.96	746.00	1031.00
Loan & Advances	10586.17	12922.54	15545.78	21759	27999
Ratio (Times)	0.0490	0.0492	0.0434	0.0343	0.0368
NIBL					
Net Profit	232.15	350.54	501.40	696.72	900.62
Loan & Advances	10126.06	12776.21	17286.43	27529.31	36827.16
Ratio (Times)	0.0229	0.0274	0.0290	0.0253	0.0245

C. Total Interest Earned to Total Outside Assets Ratio

Calculation of Total Interest earned to Total Outside Assets Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Total Interest Earned	1068.75	1310.00	1587.76	1978.00	2798.00
Total Outside Assets	14853.40	19101.07	24490.89	26803.35	28142.82
Ratio (Times)	0.0720	0.0686	0.0648	0.0738	0.0994
NIBL					
Total Interest Earned	886.80	1172.74	1584.99	2194.28	3267.97
Total Outside Assets	14060.25	18379.08	23792.11	34403.33	44226.97
Ratio (Times)	0.0631	0.0638	0.0666	0.0638	0.0739

D. Total Interest Earned to Total Working Fund Ratio

Calculation of Total Interest earned to Total Working Fund Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Total Interest Earned	1068.75	1310.00	1587.76	1978.00	2798.00
Total Working Fund	17186.33	22329.97	27253.39	37526.00	44276.00
Ratio (Times)	0.0622	0.0587	0.0583	0.0527	0.0632
NIBL					
Total Interest Earned	886.80	1172.74	1584.99	2194.28	3267.97
Total Working Fund	16274.06	21330.14	27590.84	38922.91	52977.65
Ratio (Times)	0.0545	0.0550	0.0574	0.0564	0.0617

E. Total Interest Paid to Total Working Fund Ratio

Calculation of Total Interest Paid to Total Working Fund Ratio of NABIL & NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Total Interest Paid	243.54	357.15	555.71	758.44	1153.28
Total Working Fund	17,186.33	22,329.97	27,253.39	37526.00	44276.00
Ratio (Times)	0.0142	0.0160	0.0204	0.0202	0.0260
NIBL					
Total Interest Paid	354.55	490.95	685.53	992.16	1686.97
Total Working Fund	16,274.06	21,330.14	27,590.84	38922.91	52977.65
Ratio (Times)	0.0218	0.0230	0.0248	0.0255	0.0318

Appendix – 4

Risk Ratio

A. Liquidity Risk Ratio

Calculation of Liquidity Risk Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Cash & Bank Balance	559.38	630.24	1,399.83	2671.00	3372.00
Total Deposits	14,586.61	19,347.40	23,342.29	31915.00	37348.00
Ratio (Times)	0.0383	0.0326	0.0600	0.0837	0.0903
NIBL					
Cash & Bank Balance	1,340.49	2,336.52	2,441.51	3754.94	7918.00
Total Deposits	14,254.57	18,927.31	24,488.86	34451.73	46698.10
Ratio (Times)	0.0940	0.1234	0.0997	0.1089	0.1696

B. Credit Risk Ratio

Calculation of Credit Risk Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Total Loan & Advances	10,586.17	12,922.54	15,545.78	21759.00	27999.00
Total Assets	17,186.33	22,329.97	27,253.39	37133.00	43867
Ratio (Times)	61.60	57.87	57.04	0.0527	0.0633
NIBL					
Total Loan & Advances	10,126.06	12,776.21	17,286.43	27529.31	36827.16
Total Assets	16,274.06	21,330.14	27,590.84	39405.96	53596.75
Ratio (Times)	62.22	59.90	62.65	0.6986	0.6871

C. Capital Risk Ratio

Calculation of Capital Risk Ratio of NABIL and NIBL

Particular	Fiscal Year				
	2004/05	2005/06	2006/07	2007/08	2008/09
NABIL					
Capital	1,657.63	1,874.99	2,056.05	2596.83	2978.43
Risk Weighted Assets	10,586.17	12,922.54	15,545.78	27010.00	32500.00
Ratio (Times)	15.66	14.51	13.23	0.0961	0.0916
NIBL					
Capital	1,180.17	1,415.44	1,878.12	2686.79	3907.84
Risk Weighted Assets	10,126.06	12,776.21	17,286.43	23436	34484
Ratio (Times)	0.1165	0.1108	0.1086	0.1146	0.1133

Appendix – 5
Calculation of Mean, Standard Deviation and Co-efficient of Variation of
Current Ratio of NABIL and NIBL

Fiscal Year	NABIL		NIBL	
	X ₁	X ₁ ²	X ₂	X ₂ ²
2004/05	0.9641	0.9296	0.9254	0.8564
2005/06	0.8338	0.6952	0.9247	0.8550
2006/07	0.8774	0.7698	0.9466	0.8960
2007/08	1.0530	1.1088	1.0860	1.1794
2008/09	1.0606	1.1249	1.0069	1.0138
	∑ X ₁ = 4.7889	∑ X ₁ ² = 4.6283	∑ X ₂ = 4.8896	∑ X ₂ ² = 4.8006

Where,

X₁ = Total Current ratio of NABIL Bank

X₂ = Total Current ratio of Investment Bank

Calculation of Mean Ratio of NABIL Bank Current Ratio

$$\text{Mean} = \frac{\sum X_1}{N} = \frac{4.7889}{5}$$

$$= 0.9578$$

Calculation of Standard Deviation of Current Ratio

$$\text{S.D} = \sqrt{\frac{\sum (X_1 - X)^2}{N - 1}}$$

$$\text{S.D.} = \sqrt{\frac{\sum (X_1)^2}{N} - \left(\frac{\sum X_1}{N}\right)^2}$$

$$= \sqrt{\frac{4.6283}{5} - \left(\frac{4.7889}{5}\right)^2}$$

$$= \sqrt{0.9257 - 0.9174}$$

$$= 0.0520$$

Calculation of Coefficient of Variation (C.V.)

$$\begin{aligned} CV &= \left[\frac{\sigma}{\bar{X}} \times 100 \right] \% \\ &= \left[\frac{0.0520}{0.9498} \times 100 \right] \\ &= 5.47 \end{aligned}$$

Calculation of Mean, Std. Deviation and coefficient of variation of NIBL
calculated accordingly

Appendix – 6

A) Calculation of trend values of loan & advances to total deposit ratio of NABIL

Fiscal Year (t)	Ratio (Y)	X = t–2006/07	X²	XY	Yc = a + bx
2004/05	72.57	(2.00)	4.00	(145.14)	65.16
2005/06	66.79	(1.00)	1.00	(66.79)	65.78
2006/07	66.60	0.00	0.00	0.00	66.4
2007/08	68.18	1.00	1.00	68.18	67.02
2008/09	74.97	2.00	4.00	149.94	67.64
Total	464.8		10.00	6.19	

Here, let the straight line trend equation $Y_c = a + bx$

Where, Y = Annual Ratio in Percentage

Now,

$$a = \frac{\sum Y}{N} = \frac{464.8}{5} = 66.4$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{6.19}{10} = 0.62$$

Projected Trend Value of Loan and Advance to Total Deposit Ratio of NABIL
for Next Five Year

Fiscal Year (t)	X = t–2006/07	Yc = a + bx
2009/10	3.00	68.26
2010/11	4.00	68.88
2011/12	5.00	69.50

Calculation of Trend Value of NIBL is as follow.

B) Calculation of trend values of loan & advances to total deposit ratio of NIBL

Fiscal Year (t)	Ratio (Y)	X = t-2006/07	X²	XY	Yc = a + bx
2004/05	71.04	- 2.00	4.00	- 142.08	67.97
2005/06	67.50	-1.00	1.00	- 67.50	70.78
2006/07	70.59	0.00	0.00	0.00	73.58
2007/08	79.89	1.00	1.00	79.89	82.69
2008/09	78.86	2.00	4.00	157.72	84.47
Total	367.88		10.00	28.03	

Here, let the straight line trend equation $Y_c = a + bx$

Where, Y = Annual Ratio in Percentage

Now,

$$a = \frac{\sum Y}{N} = \frac{367.88}{5} = 73.58$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{28.03}{10} = 2.803$$

Projected Trend Value of Loan and Advance to Total Deposit Ratio of NIBL for Next Three Year

Fiscal Year (t)	X = t-2006/07	Yc = a + bx
2009/10	3.00	81.99
2010/11	4.00	84.79
2011/12	5.00	87.60

Appendix -7

Fiscal Year	Deposit (X)	Loan & Advance (Y)	X ²	Y ²	XY
2004/05	14586.61	10586.17	212769191.3	112066995.3	154416333.18
2005/06	19347.40	12922.54	374321886.8	166992040.05	250017550.40
2006/07	23342.29	15545.78	544862502.4	241671275.81	362874105.04
2007/08	31915.00	21759.00	1018567225	473454081	694438485
2008/09	37348.00	27999.00	1394871304	783944001	1045706652
Total	ΣX = 126539.3	ΣY = 88812.49	ΣX² = 3545393909	ΣY² = 1778128393	ΣXY = 2507453126

A) Calculation of Co-efficient of Consultation between deposit and loan & advance if Nabil Bank

Now,

$$\text{Co-efficient of Correlation (r)} = \frac{N\Sigma XY - \Sigma X \cdot \Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 2507453126 - 126539.3 \times 88812.49}{\sqrt{5 \times 3545393909 - (126539.3)^2} \sqrt{5 \times 17781283.93 - (88812.49)^2}}$$

$$= 0.9905$$

$$r^2 = 0.9811$$

$$\text{Probable Error P.F. (r)} = 0.6745 \left(\frac{1-r^2}{\sqrt{N}} \right)$$

$$= 0.6745 \left(\frac{1-0.9811}{\sqrt{5}} \right)$$

$$= 0.0057$$

$$6P.E.(r) = 6 \times 0.0030$$

$$= 0.034 < 0.9905$$

∴ r is highly significant

Appendix -8

Fiscal Year	Deposit (X)	Loan & Advance (Y)	X ²	Y ²	XY
2004/05	14254.67	10126.06	203192765.88	102537091.12	144342631.09
2005/06	18927.31	12776.21	358253063.84	163231541.96	241819287.30
2006/07	24488.86	17286.43	599704264.10	298820662.14	423324964.17
2007/08	34451.80	27145.00	1186926523	736851025	935194111
2008/09	46697.90	36250.00	2180693864	1314062500	1692798875
Total	$\sum X =$ 138820.54	$\sum Y =$ 103583.7	$\sum X^2 =$ 4528763332	$\sum Y^2 =$ 2615502820	$\sum XY =$ 3437480881

Now,

$$\text{Co-efficient of Correlation (r)} = \frac{N\sum XY - \sum X \cdot \sum Y}{\sqrt{N\sum X^2 - (\sum X)^2} \sqrt{N\sum Y^2 - (\sum Y)^2}}$$

$$= \frac{5 \times 3437480881 - 138820.54 \times 103583.7}{\sqrt{5 \times 4528763332 - 138820.54^2} \sqrt{5 \times 2615502820 - 103583.7^2}}$$

$$= 0.9978$$

$$r^2 = 0.9956$$

$$\begin{aligned} \text{Probable Error P.F. (r)} &= 0.6745 \left(\frac{1-r^2}{\sqrt{5}} \right) \\ &= 0.6745 \left(\frac{1-0.9956}{\sqrt{5}} \right) \end{aligned}$$

$$= 0.0013$$

$$6P.E.(r) = 6 \times 0.0006$$

$$= 0.0078 < 0.9978$$

∴ r is highly significant

Calculation of hypothesis on loan & advance to total deposit ratios of NABIL and NIBL

Fiscal Year	NABIL			NIBL		
	X_1	$x_1 = (x_1 - \bar{x}_1)$	X_1^2	X_2	$x_2 = (X_2 - \bar{x}_2)$	X_2^2
2004/05	72.57	2.75	7.56	71.04	(2.57)	6.60
2005/06	66.79	(3.03)	9.18	67.50	(6.08)	36.97
2006/07	66.60	(3.22)	10.37	70.59	(2.99)	8.94
2007/08	68.18	(1.64)	2.69	79.89	6.31	39.82
2008/09	74.97	5.15	26.52	78.86	5.28	27.89
Total	$\sum X_1 =$ 349.11	$\sum x_1 =$ 0.00	$\sum X_1^2 =$ 56.32	$\sum X_2 =$ 367.88	$\sum x_2 =$ 0.00	$\sum X_2^2 =$ 120.21

Here,

$$\bar{X}_1 = \frac{\sum X_1}{n}$$

$$\bar{X}_1 = \frac{349.11}{5}$$

$$= 69.82$$

$$\bar{X}_2 = \frac{\sum X_2}{n}$$

$$\bar{X}_2 = \frac{367.88}{5}$$

$$= 73.58$$