

INVESTMENT POLICIES OF JOINT VENTURE BANKS IN NEPAL

(A case study of Nabil Bank Limited and Standard Chartered Bank Nepal Limited)

CHAPTER – I

INTRODUCTION

1.1 Background of the Study

Nepal is a land-locked country situated between two Asian giants China and India, both having well developed economic condition. The development of a country is measured by its economic indices. Nepal, like any other country has been laying emphasis on the uplifting of its economy. The process of economic development depends upon various factors. Financial institutions are viewed as catalyst in the process of economic growth. The mobilization of domestic resources, capital formation and its proper utilization plays an important role in the economic development of a country. Every financial institution, big or small, be it a commercial bank or a finance company or a cooperative bank, play an important role in the development of a country.

Commercial banks are major financial institutions, which occupy an important place in the economy because through the deposits they collect, they provide much needed capital for the development of industry, trade and business and other deficit sectors, thereby contributing to the economic growth of the nation.

Investment in the actual sense refers to the sacrifice of current dollars for future dollars . Investment involves two attributes, time and risk. The sacrifice takes place in the present and is certain. The reward comes later, and the magnitude of which is uncertain. In some cases the element of time predominates (for example, government bonds). In other case, risk is more dominant (for example call option

on common stock). In yet others, both time and risk play a dominant role (for example share of common stock).

Investment is the use of money to earn profit. It can be said that investment is concerned with the proper management of the investor's wealth, which are the sum of the current income and the present value of all future income. Fund to be invested come from assets already owned, borrowed money and saving or foregone consumption. By foregoing today and investing the saving, investors expect to enhance their future consumption possibilities i.e. the fund is invested to increase wealth. Investors also seek to manage their wealth effectively obtaining the most from it, while protecting it from inflation, taxes and other possible harms.

Investment policy involves determining the investor's objectives and the amount of his or her invest-able wealth. It is not appropriate for an investor to say that his objective is to make a lot of money . What is appropriate for an investor in this situation is to state that the objective to earn a profit while recognizing that there exist some chances of incurring large losses. Investment objectives should be stated in terms of both risk and return.

Investment promotes economic growth and contributes to a nation's wealth. When people deposit money in the bank, the bank may invest by lending the funds to various businesses. These firms in return may invest in new factories and equipment to increase their production and efficiency. In addition to borrowing from banks, most companies issue stocks and bonds, which they sell to investors to raise capital needed for business expansion. Government also issues bonds to invest in various projects. Nepal Rastra Bank on behalf of Nepal Government issues bonds, treasury bills to finance the long term and short-term needs of the government. All such investment by individuals, business, government and government entities involve a present sacrifice of income to get an expected future benefit.

Since from past few years, the situation of country is deteriorating day by day. Uncertainty and fear have bounded every sectors of the economy. Every year the government is assigning fewer funds for development purpose. This has seriously hit not only the economic growth of the country but also the investment environment in the country. So being active members of the country, commercial banks of Nepal are also affected by this situation. On this ground, management of banks should have to think precisely before making any investment. Therefore, all these events have raised the necessity for formulating sound investment policy. With this connection, by this study having topic INVESTMENT POLICIES OF JOINT VENTURE BANKS IN NEPAL (A CASE STUDY OF NABIL BANK LIMITED AND STANDARD CHARTERED BANK NEPAL LIMITED), it is tried to find out the investment policies of the commercial joint venture banks. Further, this study tries to explore, whether the policies they have formulated are sufficient or not, whether they have managed their invest-able fund in proper place or not and so on. Since sound investment policy ensures minimum risk and maximum profit from lending, by this study it is tried to find out the policy and act regarding investment of JVBs.

1.1.a. Origin and Development of Banks

The evolution of bank is not a non-phenomenon. There was crude firm 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 jewellery. 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 larger 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

The banks are such types of institutions, which deal with money and substitute for money. They deal with credit and credit instruments. Good circulation of credit is very much important for the bank. Unsteady and uneven flow of credit with ad-hoc decisions harms the economy as well. Thus, to collect fund and utilize it in a productive sectors is the major function of a bank. 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., 1963,65) 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. (Diana, 1994,24). 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.

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 institutions 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
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There were only two banks prior to 1980's they are NBL and RBB. All the three Commercial Banks (Grindlays Bank, Nepal Arab Bank and Nepal Bangladesh Bank Limited) 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, Siddhartha Bank Ltd were established by the private sector entrepreneurs of Nepal. Some of the joint venture banks have changed their name after the foreign investor disinvest their stake to Nepali entrepreneurs. Nepal Arab Bank Ltd. is now known as Nabil Bank Ltd., similarly Nepal Grindlays Bank Ltd, Nepal

Indosueze 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.

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

Class A: Commercial Banks				
S.No.	Names	Operation Date (A.D.)	Head Office	Paid up Capital (Rs. In Million)
1	Nepal Bank Limited	11/15/1937	Kathmandu	380.4
2	Rastriya Banijya Bank	1/23/1966	Kathmandu	1172.3
3	Agriculture Development Bank Ltd.	1/2/1968	Kathmandu	10777.5
4	NABIL Bank Limited	7/16/1984	Kathmandu	965.75
5	Nepal Investment Bank Limited	2/27/1986	Kathmandu	1606.07
6	Standard Chartered Bank Nepal Limited.	1/30/1987	Kathmandu	620.8
7	Himalayan Bank Limited	1/18/1993	Kathmandu	1013.5
8	Nepal SBI Bank Limited	7/7/1993	Kathmandu	874.5
9	Nepal Bangladesh Bank Limited	5/6/1994	Kathmandu	744.1
10	Everest Bank Limited	10/18/1994	Kathmandu	691.4
11	Bank of Kathmandu Limited	3/12/1995	Kathmandu	603.1
12	Nepal Credit and Commerce Bank Ltd	10/14/1996	Siddharthanagar,Rupendehi	1399.5
13	Lumbini Bank Limited	7/17/1998	Narayangadh,Chitawan	996.31
14	Nepal Industrial & Commercial Bank Ltd	7/21/1998	Biaratnagar,Morang	950.4
15	Machhapuchhre Bank Limited	10/3/2000	Pokhara, Kaski	1314.64
16	Kumari Bank Limited	4/3/2001	Kathmandu	1078.27
17	Laxmi Bank Limited	4/3/2002	Birgunj, Parsa	915
18	Siddhartha Bank Limited	12/24/2002	Kathmandu	828
19	Global Bank Ltd.	1/2/2007	Birgunj, Parsa	1000
20	Citizens Bank International Ltd.	6/21/2007	Kathmandu	700
21	Prime Commercial Bank Ltd	9/24/2007	Kathmandu	700
22	Sunrise Bank Ltd.	10/12/2007	Kathmandu	700
23	Bank of Asia Nepal Ltd.	10/12/2007	Kathmandu	700
24	Development Credit Bank Ltd.	1/23/2001	Kamaladi, Kathmandu	1107.5
25	NMB Bank Ltd.	11/26/1996	Babarmahal, Kathmandu	1000

Source: www.nrb.org.np

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. Profiles of the Banks under Study

NABIL Bank Ltd.

NABIL Bank Ltd. (erstwhile Nepal Arab Bank Ltd.) was established on July 12th 1984 under a technical service agreement with Dubai Bank Ltd., Dubai, which was later, merged with Emirate Bank Ltd., Dubai. NABIL is the first and major joint venture bank in the country with key points of representation all over Nepal. The bank is managed by a team of qualified and highly experienced professionals.

The shareholding are distributed as follows:

- 50% is owned by N.B. International Limited, Ireland.
- 20% is owned by local financial institutions and
- 30% by the Nepalese public.

NABIL is amongst the most successful joint venture organizations in Nepal registering strong growth in balance sheet footing as well as profits year after year. The initial capital of Rs. 30 million, invested in 1984, has grown to Rs.2.3 billion as at mid July 2007.

The bank provides a complete range of personal, commercial and corporate banking and related financial services through its 15 branches and 2 airport counters, the largest number of braches amongst any JVB"s in Nepal. The bank was able to receive "Bank of Year 2004" award from Financial Times London.

The bank has been a pioneer in introducing modern banking and numerous innovative products into Nepal. It was the first to introduce consortium finance in Nepal. NABIL is the sole banker to a multitude of International Aid Agencies, NGO's, Embassies and consulates in the Kingdom, which is a compliment to its image and servicing capabilities. NABIL was the first bank to issue credit card in Nepal. NABIL has correspondent banking relationship with banks in 47 countries.

NABIL is a member of SWIFT. It has also been providing ATM facilities to its account holders.

Standard Chartered Bank Nepal Ltd.

Nepal Grindlays Bank Ltd. (recently named Standard Chartered Bank Nepal Ltd.) was established in 1987 A.D. as a joint venture bank with 50% of the equity share capital originally owned by ANZ Grindlays Bank, UK that managed and controlled overall activities of the bank. The bank has made significant contribution in the Nepalese banking sector since its inception.

In August 2000, the ownership of ANZ Grindlays Bank, U.K. was transferred to SCB, Australia. Since then, the bank is being managed and controlled by SCBL Australia, as Standard Chartered Bank Nepal Ltd. (SCBNL) in Nepal. SCBL holds 50% of total equity capital investment. Out of 35% of the total equity share capital that was held by NBL, Standard Chartered Bank, UK, now has bought 25%. The general public holds the remaining 25% shares.

The bank is being managed under joint venture & technical services agreement (T.S.A.) signed between SCB and Nepalese promoters. The bank has been providing various banking services to its customers through its branches nationwide. It has four branches including its main branch /corporate office in the Kathmandu valley. The bank is well equipped with the latest technology in the banking sector. It leads the Nepalese list in the best 500 banks of Asia as voted by Fortune magazine. It has some of the best banking professionals in the banking industry in Nepal.

Some of the facilities are listed below.

- Tele-banking
- Credit Card facilities
- Foreign Currency Transaction
- Automated Teller Machines

- Personalized & Corporate Financial services
- SWIFT, TELEX
- Western Union Money Transfer
- Money Gram

The present capital structure of SCBNL is shown below.

(Rs. in million)

Authorized equity share central	1000.00
Issued Capital	500.00
Paid up Capital	413.25

Source: Annual Report 2006/07

Features of Sound Investment Practices

Joint Venture: "A joint venture is the joining of forces between two or more enterprises for the purpose of carrying out a specific operation (industrial or commercial) investment, production or trade" (Grupte, 1984,8).

In order to operate a business organization under joint venture basis, there should at least be two partners from two different countries. Joint venture banks are the commercial banks formed by joining two or more enterprises for the purpose of carrying out specific operation such as investment in trade, business and industry as well as in the form of negotiation between various groups of industries or traders to achieve mutual exchange of goods and services. JVB's 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 and their parent banks each supplying agreed percentage of total investment. The parent banks, which have experience in highly merchandised and efficient modern banking services in many parts of the world, have come to Nepal with latest technology and advanced management skills. JVB's are established by joining forces and with ability to achieve a common goal with each of the partners. They

are more efficient and efficient monetary institution in modern banking fields than other old type of banks in Nepalese context.

The primary objective of these JVB's is always to earn profit by investing or granting loan and advances to people associated with trade, business, industry etc.

1.2 Objectives of the Study

- a) To compare the investment policy of the Nabil and SCBNL.
- b) To compare about the utilization of available fund of Nabil Bank's in comparison to SCBNL
- c) To evaluate the liquidity, profitability and risk position of Nabil Bank in comparison to SCBNL .
- d) To find out the empirical relationship between deposits loan and advances, investment, net profit and compare them between Nabil & SCBNL.
- e) To provide the suggestion of improving the investment policy to Nabil and SCBNL on the basis of the findings of the analysis.

1.3 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, and SCBNL and point out the various weaknesses of defects inherent in it and provide package of suggestions for its improvement.

1.4 Limitations of the Study

This study is simply a partial study for the fulfillment of MBS degree, which has to be finished within limited period. Hence, this study is not far from several limitations of its own kind, which weaken the scope of the study to some extent.

Some of such limitations are as follows.

- a. The study is mainly based on secondary data collected from different sources.
- b. The study period will be covered by only seven fiscal year i.e. from 2000/2001 to 2006/2007.
- c. Out of the numerous affecting factors, this study concentrates only on those factors, which are related with investment policy, and available in the form required for analyzing the different issues.
- d. Due to wide range of data deficiencies only simple technique have been used for the analysis of the data.

- e. The study deals with only one other commercial banks to compare with Nabil bank Ltd. and other commercial banks have not been accounted.

1.5 Organization of the Study

The whole study has been divided into five 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 SCBNL. 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

2.1 Background

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:

2.1.1 Review of Books

2.1.2 Review of Previous Study

Review of Articles

Review of Research Papers

Review of Thesis

2.1.3 Review of Legislative Provisions

2.1.1 Review of Books

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.

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

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

Charles P. Jones (Charles, 1991; 2)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.

2.1.1.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; ascertainability, 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.

2.1.1.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

i) 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.

ii) 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.

2.1.2 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.

2.1.2.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(Morris, 1990;81), 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 .

Sunity Shrestha(Dr. Shrestha, 2055; 23-27) 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..

Shree Prasad Poudel(Poudel, 2059; 45-51), 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.

Bodhi B. Bajracharya(Bajracharya,1990;93-97) 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.

2.1.2.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 (Dr. Thapa, 1994, 29-37), 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. Radhe S. Pradhan (Dr. Pradhan, 2003; 123-133) 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.

2.1.2.c Review of Master Degree and Ph.D. 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 (Bhattarai, 1978), 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 are 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.

Sunity Shrestha(Dr.Shrestha, 1993) 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.

Kishor Poudel(Poudel,2002), 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.

Sharad Wagle's. (Wagle, 2000) 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.

Mrs. Rabina Bajracharya (Bajracharya, 2000), 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.

Kul Chandra Pandit(Pandit, 2003) **in his thesis**, “A study on the investment policy analysis of Standard Chartered Bank Nepal Limited in comparison to Nabil and Nepal Bangaledesh 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.

Mukunda Prasad Lamichhane(Lamichhane, 2000) 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.

Mr. Shiba Raj Loudari (Mr. Loudari, 2001) conducted a study on “A study on investment policy of Nepal Indosuez Bank Ltd. in comparison to Nepal SBI Bank Ltd.” with the objective of:

-) To examine the liquidity, asset management and profitability position and investment policy of NIBL in comparison to Nepal SBI Bank Ltd.
-) To study the growth ratios of loans and advances and investment to total deposit and net profit of NIBL in comparison to Nepal SBI bank ltd.
-) To analyses relationship between deposit and investment, deposits and loan & advances, net profit and outside assets of Nepal Indosuez Bank Ltd. In comparison to Nepal SBI Bank Ltd.

The research findings of the study are as follows:

-) Current ratios for both the banks are satisfactory.
-) Although Cash reserve ratio is managed by both banks as per Nepal Rastrya Bank directives, both banks have not paid sufficient insight towards cash management. Their cash reserves have fluctuated in a high degree.
-) Nepal SBI Bank Ltd. has increased investment in government securities where as Nepal Indosuez Bank has decreased.
-) Nepal Indosuez Bank Ltd. has maintained both current ratio and cash reserve ratio better than Nepal SBI Bank Ltd. But its cash and bank balance, investment in government securities and loan and advances in comparison to current assets are lower than that of Nepal SBI Bank Ltd.
-) Deposit utilization of Nepal Indosuez Bank Ltd. is less effective than that of Nepal SBI Bank Ltd. Further Nepal Indosuez Bank Ltd. has invested lesser amount on government securities and shares and debenture than that of Nepal SBI Bank.
-) Nepal Indosuez Bank Ltd. did a better performance in return on total assets and loan and advances and interest earning, but it paid lower interest amount to working fund.
-) The analysis of growth ratios shows that growth ratios of total deposit, loan and advances, total investment and net profit of Nepal Indosuez Bank are less than that of Nepal SBI Bank.
-) The trend value of loan and advances to total deposits ratio is decreasing in case of both banks. The trend value of total investment to total deposits ratio is also decreasing in case of both banks.

2.1.3 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 all the banks are required to invest 3 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 25 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 5.50 percent of total deposits in the NRB as cash 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 into four categories. They are as follows:

- Pass Categories with 1% provision.
- Sub Standard with 25% of provision.
- Doubtful with 50% of provision.
- Bad with 100% of provision.

CHAPTER- III

RESEARCH METHODOLOGY

3.1 Background

Research methodology is a way to systematically solve the research problem. It refers to the various sequential steps that are to be adopted by a researcher during the course of studying the problem with certain objectives. This chapter refers to the overall research method from the theoretical aspects to the collection and analysis of data. This study covers quantitative methodology in a greater extent and also uses the descriptive part based on both technical aspects and logical aspect.

This research tries to perform a well-designed, quantitative, and qualitative research in a very clear and direct way by using both financial and statistical tools.

3.2 Research Design

This study depends on the secondary data. It includes all the process of collecting, verifying and evaluating of past evidence systematically and objectively to reach final conclusion. Some statistical and accounting tools have been adopted to examine factors in this study. In this study descriptive and analytical research design has been done

3.3 Population and Samples

There are all together 20 commercial banks listed in Nepal Stock Exchange. For this research, those listed banks serve as population.

Among them, only two joint venture banks, viz. NABIL, SCBNL have been taken into account for research purposes as samples in this research study to compare their investment policies. They are two of the best performing JVB's in Nepal. Their profit per share, percentage of dividend paid per equity capital, net profits are among the highest in commercial banks. They are equipped with research and analysis team, proper MIS, sufficient capital and skilled manpower. They also have access to Global financial markets. These factors put them in the best position, i.e. it gives them an edge over other banks. They are best suited to exploit the opportunities that are existent. They can easily redress problem faced by other and can also avoid risks by formulating and implementing sound investment policy.

3.4 Sources of Data

This study is mainly based on secondary data. The secondary sources of data collections are Balance Sheet, P&L Accounts of concerned banks, Nepal Stock Exchange's NEPSE report. Other relating data are obtained directly from authorized persons of concerned banks, regulating authorities i.e. Ministry of Finance, NRB budget speech, published books, banks bulletin, newspapers, previous studies, central library T.U., college libraries, Securities Exchange Board etc. The data are prerequisites for any project study. The data collection entails labor and time and it is the most necessary step in project study without which the study cannot be done.

3.5 Data Presentation and Analysis

Data presentation and analysis mechanism is the core of project study. This study heavily depends on selected financial and statistical tools to accomplish the objectives of the research project. The data extracted from financial, statistical, and accounting tools have been used. These results are then compared with each

other to interpret the results. Two kind of tools have been used to achieve the purpose, namely: Financial tools and Statistical tools

3.6 Financial Tools

Financial tools basically help to analyze the strength and weakness of a firm. Ratio analysis being one of the important financial tools has been used in this study. In financial analysis a ratio is used as a benchmark for evaluating the financial position and performance of a firm. Ratios help to summarize the large quantities of financial data and to make qualitative judgment about the firm's performance. The point to note is that a ratio indicates a quantitative relationship, which can be used to make a qualitative judgment.

There are several ratios involved in analyzing and interpreting the financial statement. In this study, basically four types of ratios have been used which are related to Investment policy of banks. They are Liquidity Ratio, Asset Management Ratios (Activity Ratio), Profitability Ratio and Risk Ratio.

3.6.1 Liquidity Ratios

Liquidity Ratio measures the firm's ability to meet its current obligation. Commercial banks collect fund from the community with a commitment to return depositor's fund, facilitate withdrawal on demand. A firm should ensure that it does not suffer from lack of liquidity and also that it does not have excess liquidity. It is necessary to strike a proper balance between high liquidity and lack of liquidity. The following ratios are evaluated under liquidity ratio.

i) Cash and bank balance to total deposit ratio:

They are the most liquid of current assets to pay off depositors immediately. This ratio is calculated by dividing cash and bank balance by

total deposits. In order to bring about consistency in this research, checks for clearing have been excluded from cash and bank balance and included in other assets. Mathematically,

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

Cash and bank balance includes cash in local currency & foreign currency on hand or with banks. The total deposits consists of deposits in current account, savings account, fixed deposit account, money at call deposits, margin deposits etc. A higher ratio indicates greater ability of banks to meet their deposits and vice-versa.

ii) Cash and bank balance to current assets ratio:

This ratio measures the percentage of liquid assets i.e. cash and bank balance in the current assets of the firm. Higher ratio shows greater capacity of firms to meet cash demand. The ratio is calculated by dividing cash and bank balance by current assets. Mathematically,

$$\text{Cash \& Bank Balance to Current Assets Ratio} = \frac{\text{Cash \& Bank Balance}}{\text{Current Assets}}$$

iii) Loan and advances to total deposit ratio:

This ratio is calculated to find out how successfully the selected banks are utilizing their total deposits on loan and advances to generate profits. A higher ratio is indicative of better utilization of total deposits, but the same might not hold true from liquidity point of view. It is computed by dividing total loan and advances by total deposits. Mathematically,

$$\text{Loan and Advance to Total Deposits Ratio} = \frac{\text{Loan and Advance}}{\text{Total Deposits}}$$

iv) **Total investment to total deposit ratio:**

This ratio shows the utilization of firm's deposits on investment in government securities and purchasing shares and debentures of other companies. A high ratio is indicative of high success in mobilization of deposits in investments and vice-versa. This ratio can be calculated by dividing total investment by total deposits. Mathematically,

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

v) **Investment on government securities to total working fund ratio:**

This ratio shows the percentage of total working fund invested in government securities. In other words, this ratio measures the extent to which the banks have been successful in mobilizing their total working fund on different type of government securities. The logic behind Investment in government securities by banks is to diversify the risk by not putting all the eggs in the same basket. This is also beneficial in the sense that banks are assured of adequate liquidity. A high ratio indicates better mobilization of funds as investment on government securities and vice-versa.

This ratio can be calculated by dividing total amount of investment in government securities by the total working fund. Mathematically,

$$\text{Investment in Government Securities} = \frac{\text{Investment in Govt. Securities}}{\text{Total Working Fund}}$$

vi) **Investment on shares and debentures to total working fund ratio:**

This ratio shows the percentage of total working fund invested in purchasing shares and bonds & debentures of other companies. Investment on shares and debentures to total working fund measures the extent to

which the banks have been successful in mobilizing their total assets on shares and debenture of other companies to generate income. A high ratio indicates portion of investment on shares and debentures out of total working fund and vice-versa. This ratio is calculated by dividing the total amount of Investment in shares & debenture of other companies by total working fund. Mathematically,

$$\text{Investment on Shares \& Debentures to Total Working Fund Ratio} \quad \times \quad \frac{\text{Investment in Shares \& Debentures}}{\text{Total Working Fund}}$$

3.6.2 Profitability Ratio

The profitability ratios are calculated to measure the overall efficiency of a firm in terms of profit earning and performance. Profit is one of the major indicators of efficient performance of banks. One of the major objectives of banks is to earn profit, so profit is very crucial for the survival of banks. To meet various objectives like, maintaining good liquidity position, meet internal obligations, expansion of banking services, finance short- term government needs, commercial banks need to earn sufficient profit. A higher profit ratio shows higher efficiency of a bank.

The following ratios related to investment policy are calculated under profitability ratios:

i) **Return on loan and advance ratio:**

Return on loan and advances ratio indicates how efficiently the bank has utilized its resources in the form of loan and advances to generate good return. It measures the earning capacity of a commercial bank. This ratio is calculated by dividing net profit by loan and advances. Mathematically,

$$\text{Return on Loan \& Advances Ratio} \times \frac{\text{Net Profit / Loss}}{\text{Total Loan and Advances}}$$

ii) **Return on total assets:**

Return on total assets shows the overall profitability of working fund or total assets. Return on working fund ratio is a measuring rod of the profitability with respect to each financial resource investment of banks asset. If the banks total working fund is well managed and utilized efficiently, return on such assets will be higher and vice-versa. This ratio is calculated by dividing net profit by total working fund. It is calculated by dividing net profit by total assets. Mathematically,

$$\text{Return on Total Assets} \times \frac{\text{Net Profit / Loss}}{\text{Total Working Fund}}$$

iii) **Total interest earned to operating income ratio:**

This ratio is measured to find out the ratio of interest income with operating income of the bank. It shows how efficiently the banks have mobilized their resources in interest bearing assets i.e., loan and advances investment in government securities. Total operating income includes interest income, commission fees & discount, dividend income, foreign exchange income etc. This ratio shows the magnitude of interest income in total income. It is calculated by dividing total interest earned by net operating income. Mathematically,

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

3.6.3. Risk Ratios

Risk means uncertainty, variability of return, which is inherent in any investment portfolio of a business enterprise. Risk is an important element since investment with greater risk requires higher return than investments with lower risk. Risk ratios measures the degree of risk involved in various financial operations. The possibility of risk involved in bank's financial operations makes the bank investment a challenging task. As the notion goes, "no risk no gain", therefore, if a bank expects high return on its investment it must be prepared to accept the risk and manage it efficiently.

The following risk ratios are used to analyze and interpret the financial data and investment policy.

i) Liquidity risk ratio:

Liquidity risk of the bank defines its liquidity needs for deposit. Cash and bank balance are the most liquid of all the assets and are considered bank's liquidity sources. Deposits on the other hand refer to the liquidity needs of banks.

This ratio measures the risk associated with the liquid assets i.e., cash and bank balance that are kept to satisfy the cash demand of customers. A higher ratio shows that the banks has sufficient cash to meet its current obligations i.e. lower liquidity risk, but that may have an adverse impact on the profitability position of the bank. A trade off between liquidity and profitability must be maintained. This ratio is calculated by dividing cash and bank balance by total deposit. Mathematically,

$$\text{Liquidity Risk Ratio} \times \frac{\text{Total Cash \& Bank Balance}}{\text{Total Deposits}}$$

ii) Credit risk ratio:

Normally, every credit is good at the time it is sanctioned. Most of the bank failures are due to shrinkage in the value of loan and advances. Loan is a risky asset and risk of non-repayment of loan is known as credit risk or default risk. Credit risk ratio measures the possibility of loan going into default. While sanctioning loans banks measure credit risk involved in the project. Credit risk is calculated by dividing total loan and advances by total assets. Mathematically,

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

3.6.4 Growth Ratios

The growth ratios represent how the commercial banks are maintaining their economic and financial condition. As a conventional rule, a higher ratio is preferable. A high ratio indicates better performance of the banks and vice-versa. The growth ratios like Growth ratio of total deposit, Growth ratio of total investment, Growth ratio of loan and advances and Growth ratio of net profit are directly related to the fund-mobilization and investment of the banks are calculated. So on chapter four, the details of the above ratios are explained.

3.7 Statistical Tools

Some important statistical tools have been used to present and analyze the data for achieving the objectives of this study. Co-efficient of variance, Co-efficient of correlation, standard deviation, least square, linear trend analysis etc. have been used for the purpose of investment policy analysis.

3.7.1 Karl Pearson's correlation co-efficient analysis:

This statistical tool interprets and identifies the relationship between two or more variables. It identifies whether two or more variables are positively correlated or

negatively correlated Statistical tool helps to analyze the relationship between these variables and aids the selected banks to prepare appropriate investment policy relating to deposit collection, fund utilization (loan and advances and investment) and profit maximization.

Karl Pearson's correlation coefficient (r) can be obtained by using the following formulae.

$$r = \frac{\phi xy}{\sqrt{\phi x^2 \phi y^2}} \quad \text{Where } x = (x - \bar{x}), \quad y = (y - \bar{y})$$

Here, ϕx = Sum of observation in series x

ϕy = Sum of observation in series y

ϕx^2 = Sum of squared observation in series x

ϕy^2 = Sum of squared observation in series y

ϕxy = Sum of the product of observation in series x & y.

The co-efficient of correlation (r) lies between -1 to +1, If r = +1 there exists a significant relationship between the two variables. If r = -1, then the two variables are negatively correlated or there is no significant relationship between the two variables.

3.7.2 Trend analysis:

Under this topic the trend of deposits, loan and advances, investments and net profit of NABIL and SCBNL from F/Y 2000/2001 to F/Y 2006/2007 are analyzed. It also aids in making forecasting for the next five years up to 2011/2012. The following trend value analysis has been used in this study.

- i) Trend Analysis of total deposits.
- ii) Trend Analysis of loan and advances.
- iii) Trend Analysis of total investment.
- iv) Trend analysis of net profit.

3.7.3 Standard deviation (S.D):

The standard deviation measures the absolute dispersion. The lower the percentage of dispersion lowers the standard deviation. The lower percentage of dispersion also projects a high degree of uniformity of the observations as well as homogeneity of the series. A large value of standard deviation suggests exactly the opposite. In this study standard deviation of different ratios are calculated. Mathematically,

$$\text{S.D} = \sqrt{\frac{(\sum x - Z\bar{x})^2}{n}}$$

Co-efficient of Variation (C.V.): C.V. is the proportion of standard deviation with mean multiplied by 100. Mathematically,

$$\text{C.V.} = \frac{\text{S.D.} \times 100\%}{\text{Mean}}$$

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

4.1 Financial Analysis

This is an 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 with Standard Chartered Bank Nepal Limited.. From the point of view of the fund mobilization and investment policy only those ratios are calculated and analyzed which are relevant and important for this study. The ratios 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 required financial ratios, which are to be calculated for the purpose of this study, are computed and analyzed in the following paragraphs.

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, withdrawals, 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, analysis of liquidity needs is helpful to the preparation of cash budget and funds flow statement.

i) Cash and bank balance to total deposit ratio(CRR):

Cash and bank balance are the most liquid assets. The ratio between the cash and bank balance and total deposit measure the ability of the bank to

meet the unanticipated cash demand or cash withdrawals from all types of deposits.

This ratio is calculated by dividing cash and bank balance by total 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 (local and foreign currency), cheques and other cash items, balance with domestic and foreign banks where as the total deposits include current deposits, saving deposits, call deposits, fixed deposits, money at call and short notice and other deposits.

Table 4.1 presents with the cash and bank balance to total deposits ratio of NABIL and SCBNL.

Table 4.1: Cash and Bank Balance to Total Deposit Ratio

F/Y	NABIL	SCBNL
2000/2001	5.13	6.23
2001/2002	6.78	5.21
2002/2003	8.51	8.06
2003/2004	6.87	9.56
2004/2005	3.83	5.75
2005/2006	2.87	4.46
2006/2007	5.93	8.08
Mean	5.70	6.76
S.D.	1.79	1.70
C.V.	31.31	25.2

Source: *Appendix -4*

The figures shown in table 4.1 above reveal that the cash and bank balance to total deposit of both NABIL and SCBNL are in fluctuating trend.

NABIL had a high ratio of 8.51% in F/Y 2002/2003 and a low ratio of 2.87% in F/Y 2005/2006. Similarly, SCBNL has a high of 9.56% in F/Y 2003/2004 and a low of 4.46% in F/Y 2005/2006. The average mean ratio of SCBNL is slightly higher than NABIL i.e., 6.76% > 5.70%. This shows, SCBNL's readiness to meet customer requirement better than NABIL. The C.V. of SCBNL is slightly lower than that of NABIL i.e. 25.2% < 31.31%. On its basis, it can be concluded that SCBNL ratios are more consistent than that of NABIL's.

Although the above ratios implies a slightly better liquidity position of SCBNL, a high ratio of non-earning cash and bank balance indicates the banks inability to invest its fund in income generation areas that might have helped it to improve its profitability.

ii) Cash and bank balance to current assets 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 represents total of local and foreign currencies in hand, 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 notice, loan and advances, investment in government securities and other interest receivable and others miscellaneous current assets. This ratio is calculated by dividing cash and bank balance by current assets .

Table 4.2 deals with the cash and bank balance to current assets ratios on the basis of available data for this study.

Table 4.2: Cash and Bank Balance to Current Asset Ratio

F/Y	NABIL	SCBNL
2000/2001	4.49	5
2001/2002	5.93	4.42
2002/2003	6.88	7.17
2003/2004	5.8	8.51
2004/2005	3.29	5.03
2005/2006	2.53	4.27
2006/2007	5.13	7.38
Mean	4.86	5.96
S.D.	1.44	1.56
C.V.	29.56	26.10

Source: Appendix –5

The figures calculated in table 4.2 show that the cash and bank balance to current assets of both NABIL and SCBNL are in a fluctuating trend. NABIL has maintained a high ratio of 6.88% in F/Y 2002/03, and a low ratio of 2.53% in 2005/06. Similarly, SCBNL has had a high of 8.51 in F/Y 2003/04 anticipating higher cash requirement depositors in this F/Y. It has a low ratio of 4.27% in F/Y 2005/2006. The average mean ratio of SCBNL is slightly higher than NABIL. The C.V. of NABIL is greater than that of SCBNL i.e., 29.56% > 26.1%.

It shows that the SCBNL ratios are less consistent than that of NABIL. The above information does not show any significant difference between the JVB's with regards to meeting customer's daily cash requirement. Both

have fared well in meeting their depositor's daily cash requirement and investing the surplus fund in other productive areas.

4.1.2. Assets Management Ratios

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

Under this asset management ratio following ratios are studied.

The following ratios measure the asset management ability of NABIL and SCBNL.

i) Loan and 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,

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

Where,

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

This ratio is calculated by dividing total loan and advances by total deposits.

The data tabulated in table 4.3 below show the loan and advances to total deposit ratio of NABIL and SCBNL.

Table 4.3: Loan and Advances to Total Deposit Ratio

F/Y	NABIL	SCBNL
2000/2001	52.56	36.82
2001/2002	50.31	35.97
2002/2003	60.34	32.00
2003/2004	60.55	31.63
2004/2005	75.05	43.55
2005/2006	66.79	38.75
2006/2007	66.60	42.61
Mean	61.74	37.33
S.D.	7.97	4.34
C.V.	12.91	11.6

Source: Appendix -6

The Table 4.3 shows that the loan and advances to total deposit of both the banks have a fluctuating trend. NABIL had a high ratio of 75.05% in F/Y 2004/05 and a low ratio of 50.31% in F/Y 2001/02. Accordingly, SCBNL had a high of 43.55% and a low of 31.63%. SCBNL's loan and advances to total deposit has had a decreasing trend till F/Y 2003/04 which has dramatically increased in the year 2004/05. The mean ratio of NABIL is above 1.65 times that of SCBNL i.e. 61.74%>37.33%. NABIL seems stronger in terms of mobilization of its total deposits as loan and advances when compared to SCBNL. In terms of C.V., both seem to be equally consistent.

It can be concluded that, NABIL has been more successful in mobilizing its total deposits as loan and advances than SCBNL. On the contrary, a high ratio should not be perceived as a better state of affairs from the point of view of liquidity, as loan and advance are not as liquid as cash and bank balance and other investment.

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.

This ratio is calculated by dividing total investments by total deposits

Table 4.4: Total Investment to Total Deposit Ratios

F/Y	NABIL	SCBNL
2000/2001	48.64	61.95
2001/2002	52.88	58.58
2002/2003	44.85	55.22
2003/2004	41.33	53.68
2004/2005	29.25	50.18
2005/2006	31.93	55.67
2006/2007	38.32	54.99
Mean	41.02	55.75
S.D.	7.95	3.44
C.V.	19.37	6.2

Source: *Appendix –7*

The above information proves a highly fluctuating trend in total investment to total deposit ratios of NABIL and SCBNL. NABIL has a high ratio of 52.88% and a low ratio of 29.25%. SCBNL, on the other hand had a high ratio of 61.95% and a low ratio of 50.18% in F/Y2001/2002 and 2004/2005 respectively. SCBNL has a high mean ratio than NABIL i.e., 55.75% > 41.02%.

From mean ratio perspective, SCBNL has been more successful in mobilization of deposits on various forms of investment. From C.V.'s viewpoint, SCBNL is better in terms of consistency than NABIL.

In conclusion, the above analysis reveals that SCBNL has been more successful in mobilizing its resources on various forms of investment. What is worth mentioning is that interest on treasury bills, inter-bank lending and placements are at an all time low level, so SCBNL has not done itself justice by investing in low yield, less risky and risk free assets.

iii) **Investment in government securities to total working funds ratio:**

To some extent commercial banks seem to utilize their fund by purchasing government securities. Government securities are a safe medium of investment though it is not as 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 and to minimize its risk assets.

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 investment made on treasury bills and development bonds etc.

This ratio is calculated by dividing investment on government securities by total working fund.

The facts presented in table 4.5 reveal the nature of ratios between the investment in government securities to total working funds of NABIL and SCBNL.

Table 4.5: Investment in Government Securities to Total Working Fund Ratio

F/Y	NABIL	SCBNL
2000/2001	14.88	24.85
2001/2002	22.9	30.81
2002/2003	21.53	31.56
2003/2004	21.47	33.22
2004/2005	13.75	32.49
2005/2006	10.14	32.83
2006/2007	17.41	24.37
Mean	17.44	30.02
S.D.	4.41	3.5
C.V.	25.3%	11.7%

Source: Appendix –8

From the above figures, it is clearly seen that SCBNL has an increasing trend of investment of government securities to total working fund over the study period while NABIL has more of a fluctuating trend. NABIL has a higher ratio 22.90% in F/Y 2001/02 and a low ratio of 10.14% in F/Y 2005/2006. Similarly, SCBNL has a high ratio of 33.22% in F/Y 2003/04 and low ratio of 24.37% in 2006/2007. When mean ratio is considered, NABIL seems to be weaker than SCBNL in mobilizing of total assets as

Investment in Government securities i.e. (17.44%<30.02%). Also, when we compare C.V. of both, it reflects that ratios of NABIL are less consistent than SCBNL i.e., (25.3%>11.7%).

From the above information we can conclude that SCBNL has invested larger portion of working fund in government securities than NABIL. The ratios also indicates that both the banks have no concrete or certain investment policy with regards to what percentage of working fund to be invested in purchasing government securities.

iv) **Investment on share and debentures to total working fund ratio:**

There has been two types of investments i.e., investment on government securities and investment on shares & debenture. Investment on shares and debentures to total working fund ratio reflects the extent to 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.

The investment on share and debentures to total working fund ratio of NABIL and SCBNL have been shown in table 4.6 below.

Table 4.6: Investment on Share and Debentures to Total Working Fund Ratio

F/Y	NABIL	SCBNL
2000/2001	0.102	0.058
2001/2002	0.124	0.06
2002/2003	0.134	0.053
2003/2004	0.13	0.047
2004/2005	0.156	0.06
2005/2006	0.459	0.058
2006/2007	1.039	0.154
Mean	0.31	0.070
S.D.	0.32	0.03
C.V.	104.60	49.4

Source: Appendix -9

This table clearly reveals that both the banks have invested miniscule percentage of total working fund in purchasing share and debentures of other companies. In either case the ratio is less than 1%.

NABIL has invested slightly higher amount of total working fund on shares and debenture than SCBNL. It also has a mean ratio higher than SCBNL. It indicates that NABIL has been more successful in mobilizing it funds as Investment in shares and debenture than SCBNL, though the fund invested is marginal in comparison to total investment portfolio in case of both. The table also shows NABIL's increasing trend in investment on shares and debentures except for F/Y 2003/04, where as SCBNL has a fluctuating trend through out the period of study. In terms of C.V. both the banks has remained fairly consistent though SCBNL's variability is less than that of NABIL i.e., (104.60% < 49.4%).

4.1.3 Profitability Ratio

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 higher the efficiency of the bank.

To study the profitability of the investment of these institutions, the following ratios are calculated under profitability ratios:

i) **Return on loan and advances ratio:**

It measures the earning capacity of a commercial bank on its deposits mobilization, 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 loans, cash credit, and overdraft and bills purchased and discounted.

This ratio is calculated by dividing net profit by loan and advances.

The information provided in table 4.7 reveals the level of profitability of the investments in relation to return on loan and advances for the study period.

Table 4.7: Return on Loan and Advances Ratio

F/Y	NABIL	SCBNL
2000/2001	3.5	7.58
2001/2002	3.48	8.41
2002/2003	5.13	8.45
2003/2004	5.33	8.03
2004/2005	4.74	6.4
2005/2006	4.91	7.37
2006/2007	4.34	6.58
Mean	4.49	7.55
S.D.	0.69	0.76
C.V.	15.47	10.1

Source: Appendix -10

This table shows that the ratio of return on loan and advances of SCBNL are better than NABIL in all F/Y, through they have a fluctuating trend. NABIL's ratios have witnessed a fluctuating trend. NABIL has recorded a high ratio of 5.33% in F/Y 2003/04, and a low ratio of 3.48% in F/Y 2001/02. Similarly, SCBNL recorded a high of 8.45% in F/Y 2002/03 and a low of 6.40% in F/Y 2004/05.

The comparison of mean ratio reveals that SCBNL has a higher ratio than NABIL i.e., 7.55% > 4.49%. This shows that SCBNL has been more successful in maintaining its higher return on loan and advances than NABIL.

C.V. of SCBNL is significantly lower than NABIL i.e. 15.47% > 10.1%. It proves that NABIL has higher variability of ratio than SCBNL.

In conclusion, it can be said that NABIL's profit earning capacity by utilizing available resources is weaker compared to SCBNL, nevertheless NABIL is making significant improvements in this regard.

ii) **Return on total working fund ratio:**

This ratio measures the profit earning capacity by utilizing available resources i.e. total assets. Return will be higher if the bank's working fund is well managed and efficiently utilized.

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 4.8 below reflects the profitability position with respect to total assets of NABIL and SCBNL.

Table 4.8: Return on Total Working Fund Ratio

F/Y	NABIL	SCBNL
2000/2001	1.59	2.23
2001/2002	1.51	2.55
2002/2003	2.5	2.38
2003/2004	2.66	2.25
2004/2005	2.96	2.43
2005/2006	2.8	2.56
2006/2007	2.44	2.42
Mean	2.35	2.40
S.D.	0.53	0.12
C.V.	22.64	5.00

Source: Appendix -11

The above table 4.8 reveals that the ratio of return on total working fund is fluctuating in case of NABIL. From F/Y 2002/03 the ratio has an increasing trend but has started decreasing from F/Y 2005/2006. It has surpassed SCBNL since F/Y 2002/03. NABIL has had a high ratio of 2.96% in F/Y 2004/05 and a low ratio of 1.51% in F/Y 2001/02. Similarly, SCBNL has had a high of 2.56% and a low of 2.23% in F/Y 2005/06 and 2000/01 respectively.

SCBNL has a slightly high mean ratio than NABIL i.e., $2.40 > 2.35$. It reveals that SCBNL has been able to earn high profit on total working fund in comparison to NABIL. One point worth making here is that NABIL has managed and utilized its assets more efficiently than SCBNL till F/Y 2005/06 and its return on assets have also been higher. SCBNL has not managed its assets well post F/Y 2002/2003 and have shown some improvements in FY2005/2006 but again started its negative trend. Its return on total assets has also been lower in comparison to NABIL.

From the viewpoint of C.V., SCBNL's ratios are more consistent than NABIL i.e. $5\% < 22.64\%$. Both banks need to exert more effort in mobilizing its working assets in an efficient manner.

iii) **Total interest earned to total operating income ratio:**

This ratio is calculated by dividing total interest earning by net operating income.

The following table 4.9 shows interest earned to total operating income ratio of NABIL and SCBNL.

Table 4.9: Interest Earned to Total Operating Income Ratio

F/Y	NABIL	SCBNL
2000/2001	80.51	75.78
2001/2002	68.34	70.06
2002/2003	75.93	66.6
2003/2004	75.1	68.51
2004/2005	74.3	67.29
2005/2006	74.84	67
2006/2007	75.87	70.58
Mean	74.98	69.40
S.D.	3.31	2.96
C.V.	4.42	4.3

Source: Appendix -12

The above shows that both the banks have a fluctuating trend of interest earning ratio. SCBNL has a decreasing trend of interest earned to total operating income ratio except for F/Y 2003/04 and 2006/2007. The higher and lower ratios of NABIL are 80.51% in F/Y 2000/2001 and 68.34% F/Y 2001/2002 respectively. SCBNL has a high of 75.78% in F/Y 2000/2001 and a low of 66.60% in F/Y 2002/2003.

The mean ratio of NABIL is higher than SCBNL i.e., 74.98% > 69.40%. On the basis of mean ratio, we can say that NABIL has been more successful in earning higher amount of interest income out of total operating income.

On the other hand, the variability in interest earned to total operating income of both the banks is similar. Both have been equally consistent in their ratios.

From the above analysis, it can be concluded that NABIL has mobilized its funds in interest bearing assets better than SCBNL. It is also evident that SCBNL has given more priority to non-fund based income to earn higher profit than NABIL. NABIL needs to increase its income from off balance sheet operation as well.

4.1.4 Risk Ratio

The possibility of risk makes banks' investment as 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.

The following risk ratios have been used to measure the risk involved in financial operation of NABIL and SCBNL:

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 depositors' demand for cash. Higher the ratio, lower the liquidity risks.

We have,

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

Liquidity risk is calculated by dividing cash and bank balance by total deposits.

The information provided in table 4.10 shows the liquidity risk involved in NABIL and SCBNL.

Table 4.10: Liquidity Risk Ratio

F/Y	NABIL	SCBNL
2000/2001	5.13	6.23
2001/2002	6.78	5.21
2002/2003	8.51	8.06
2003/2004	6.87	9.56
2004/2005	3.83	5.75
2005/2006	2.87	4.46
2006/2007	5.93	8.08
Mean	5.70	6.76
S.D.	1.79	1.70
C.V.	31.31	25.20

Source: Appendix –4

As per the information processed in table 4.10, it is seen that the liquidity risk ratios of both the banks have been remained in fluctuating trend. NABIL has recorded a high ratio of 8.51% and a low ratio of 2.87%. Similarly, SCBNL has recorded a high of 9.56% and a low of 4.46%.

When mean ratios are taken in to consideration, it is found that SCBNL's liquidity risk is lower than that of NABIL i.e. $6.76 > 5.70$. SCBNL has more cash & bank balance than NABIL to meet its current obligations. But we must not discount the fact that, too much idle cash has an adverse impact on profitability. A trade off between liquidity and profitability must be maintained at all times. On comparison of C.V.'s of both the banks, both seem equally consistent.

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,

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

This ratio is calculated by dividing total loan and advances by total assets.

The comparative figures calculated and presented in table 4.11 are instrumental to examine the level of worth of the performance of these institutions in terms of credit risk management.

Table 4.11: Credit Risk Ratio

F/Y	NABIL	SCBNL
2000/2001	52.56	36.82
2001/2002	50.31	35.97
2002/2003	60.34	32
2003/2004	60.55	31.63
2004/2005	75.05	43.55
2005/2006	66.79	38.75
2006/2007	66.6	42.61
Mean	61.74	37.33
S.D.	7.97	4.34
C.V.	12.91	11.6

Source: *Appendix -6*

The above table shows that NABIL ratios are in a decreasing trend till F/Y 2001/2002. There after they have an increasing trend. The ratios of SCBNL have a decreasing trend upto F/Y 2003/2004.

NABIL has a high ratio of 75.05% in F/Y 2004/2005 and a low ratio of 50.31% F/Y 2001/2002. Similarly, SCBNL has had a high ratio of 43.55% in F/Y 2004/2005 and a low ratio of 31.63% in F/Y 2003/2004.

The mean ratio of SCBNL is lower than that of NABIL ie.,37.33%<61.74%.This indicates that NABIL has more exposure to credit risk than its counterpart. The decreasing trend of SCBNL's ratios projects a picture that SCBNL is trying to reduce its credit risk. From the point of view of C.V., both banks seem to have had consistent ratios during the study period.

4.1.5 Growth Ratios

Growth ratios are directly related to the fund mobilization and investment management of the commercial bank. It represents how well the commercial banks are maintaining the economic and financial position. Higher the ratio, better the performance of the bank and vice-versa.

Mathematically it is calculated as:

$$\mathbf{Factor} = \frac{\mathit{Last\ Year\ Figure}}{\mathit{First\ Year\ Figure}}$$

$$\mathbf{Factor} = (1+g)^{n-1}$$

Where,

g = growth ratio

n = number of period

Again, growth ratio is measured in percentage.

Under this topic the following ratios which directly related to fund mobilization and investment of the banks are calculated:

Growth rate of total deposits:

Table 4.12 presents with the comparative facts and figures related to the growth rates of total deposits.

Table 4.12: Growth Rate of Total Deposits

(Rs. Millions)

F/Y	NABIL		SCBNL	
	Total Deposits (Rs.)	%	Total Deposits (Rs.)	%
2000/2001	15839.00	0	15430.05	0
2001/2002	15506.43	(2.1)	15835.75	2.63
2002/2003	13447.66	(13.28)	18755.63	18.44
2003/2004	14119.03	4.99	21161.44	12.83
2004/2005	14587.00	3.31	19,335.09	(8.63)
2005/2006	19347.00	32.63	23061.03	19.27
2006/2007	23342.00	20.03	24647.02	6.88
Mean		6.6		7.34
S.D.		14.16		9.46

Source: Appendix 2 and Appendix 3

The growth rate of deposits of both the banks has been remained in a fluctuating trend. The average growth rates of deposits of SCBNL are significantly higher than NABIL i.e. 7.34%>6.6. During the study period NABIL has experienced a negative growth. It also reflects NABIL dismal performance in collecting more deposits. NABIL has experienced negative growth rate in F/Y 2001/2002 and 2002/2003 respectively. NABIL has consciously decreased deposits by 2.1% in F/Y 2001/2002 and 13.28% in F/Y 2003/2004 as per its strategy of shedding high cost and unprofitable deposit. But since 2005/2006 it has completely been focused on deposit collection.

On the contrary, SCBNL has been successful in increasing its deposit year after year except for F/Y 2004/2005 where it has had a negative growth. This is a solid proof of its high quality service, image, and credibility in the mind of depositors.

Growth rate of total loan and advances:

Table 4.13 below presents with the comparative display of the growth rate of total loan and advances of both the projects.

Table 4.13: Growth Rate of Total Loan and Advances

(Rs. Millions)

F/Y	NABIL		SCBNL	
	Total loan & advances (Rs.)	%	Total loan & advances (Rs.)	%
2000/2001	8324.44	0	5681.35	0
2001/2002	7801.85	(5.28)	5696.18	0.26
2002/2003	8113.68	4.00	6000.16	5.35
2003/2004	8548.66	5.36	6693.86	11.54
2004/2005	10,947.00	28.06	8420.86	25.80
2005/2006	12922.54	18.05	8935.42	6.11
2006/2007	15545.77	20.30	10502.64	17.54
Mean		9.9		9.52
S.D.		11.93		9.04

Source :Appendix 2 and Appendix 3

Based on table 4.13, the growth rate of total loan and advances of both the banks are in a fluctuating trend. The average growth rate of total loan and advances of NABIL is better than SCBNL i.e. 9.9% > 9.52%. This ratio can be misleading in the sense that the ratio of loan and advance to current assets, total deposits, total working fund of SCBNL is comparatively less than that of NABIL. NABIL has experienced a negative growth in F/Y 2001/2002.

Probably it was due to a cautious approach taken by the bank in consolidating its business instead of exploring high-risk new business.

Growth rate of total investment:

Table 4.14 shows the comparative display of growth rate of the total investment over the specified period of time.

Table 4.14: Growth Rate of Total Investment

(Rs. Millions)

F/Y	NABIL		SCBNL	
	Total Investment (Rs)	%	Total Investment (Rs)	%
2000/2001	7704.31	0	9559.18	0
2001/2002	8199.51	6.43	9275.88	(2.96)
2002/2003	6031.18	(26.44)	10357.68	11.66
2003/2004	5835.95	(3.24)	11360.33	9.68
2004/2005	4267.23	(26.88)	9702.50	(14.59)
2005/2006	6178.53	44.79	12838.55	32.32
2006/2007	8945.31	44.78	13553.23	5.57
Mean		5.63		5.95
S.D.		27.44		13.59

Source: Appendix 2 and Appendix 3

The growth rates of total investment of both the banks are in a fluctuating trend. NABIL has witnessed a high growth rate of 44.79% in F/Y 2005/2006 and a negative growth rate of 26.88% in F/Y 2004/2005.

On the other hand SCBNL has had a high growth rate of 32.32% in F/Y 2005/2006 and highest negative growth rate of 14.59% in F/Y 2004/2005. The

average growth ratio of investment of SCBNL seems to be higher than NABIL i.e., 5.95% > 5.63.

Growth rate of net profit:

The comparative figures to reveal the growth rate of net profit for the undertaken time period have been presented in table 4.15 hereunder:

Table 4.15: Growth Rate of Net Profit (Rs. Millions)

F/Y	NABIL		SCBNL	
	Net Profit (Rs.)	%	Net Profit (Rs.)	%
2000/2001	291.38	0	430.83	0
2001/2002	271.64	(6.77)	479.21	11.23
2002/2003	416.24	53.23	506.93	5.78
2003/2004	455.32	9.39	537.80	6.09
2004/2005	519	13.99	539.20	0.26
2005/2006	635.26	24.9	658.76	22.17
2006/2007	673.96	6.09	691.67	4.99
Mean		14.04		7.22
S.D.		19.67		7.06

Source: Appendix 2 and Appendix 3

The growth rate of net profit of both the banks has a fluctuating trend. NABIL has recorded a high growth rate of 53.23% in F/Y 2002/2003 and a low negative growth rate of 6.77% in F/Y 2001/2002. Similarly, SCBNL has a high growth rate of 22.17% in F/Y 2005/2006 and a low growth rate of 0.26% in F/Y 2004/2005. Overall, SCBNL has been successful in increasing its net profit year after year though not in a manner its stakeholders would have liked it to.

The mean growth rate of NABIL is higher than SCBNL i.e., $14.04\% > 7.22\%$. This is due to a surge in net profit of NABIL by 53.23% in F/Y 2002/2003 over the previous F/Y. This sudden surge in net profit has made the growth ratios of NABIL unstable in comparison to SCBNL.

4.2 Statistical Analysis

Under this, some statistical tools such as coefficient of correlation analysis between different variables, trend analysis of deposits, loan and advances, investment and net profit as well as hypothesis test (t-statistic) are used to achieve the objectives of the study.

The following section deals with the various statistical analysis of the investment effectiveness of these two projects.

4.2.1 Coefficient of Correlation Analysis

Under this topic, Karl Pearson's coefficient of correlation is used to find out the relationship between deposit and loan and advances, deposit and total investment, outside assets and net profit, deposits and net profit, deposits and interest earned, loan and advances and interest paid, total working fund and net profit.

i) Coefficient of correlation between deposits and loans and advances:

The coefficient of correlation between deposits and loan and advances measures the degree of relationship between them. In this study, the present researcher has taken deposit as an independent variable denoted by (x) and loans and advances as dependent variable (y). The main objective of calculating 'r' between these

two variables is to justify whether deposits are significantly used as loan and advances or not.

Table 4.16 shows the value of 'r' r^2 , PEr and 6PEr between total deposits and loans and advances of NABIL and SCBNL during the study period.

Table 4.16: Correlation between Deposit and Loan and Advances

Bank	Evaluation Criteria			
	R	r^2	PEr	6PEr
NABIL	0.9021	0.8137	0.047	0.285
SCBNL	0.876	0.767	0.059	0.366

Source: Appendix A1 and A2

In the table, the coefficient of correlation between deposits and loans and advances in case of NABIL is 0.9021. This indicates that there exists a somewhat positive relationship between deposit and loan and advances. The calculated value of (r^2) or coefficient of determination is 0.8137. This means 81.37% of variation of the dependent variable (loan and advances) has been explained by the independent variable (deposit). When the value of 'r' i.e., 0.9021 is compared with six times the probable error or 6PEr. i.e., 0.285, we can say that there exists significant relationship between deposits and loan advances because 'r' is higher than six times PER i.e. $0.9021 > 0.285$.

The coefficient of correlation 'r' between deposits and loan and advances incase of SCBNL is 0.876, which gives us an indication of higher positive correlation between them. Similarly, the value of coefficient of determination (r^2) is found to be 0.767. This shows that 76.7% variation of dependent variable (loan and advances) has

been explained by the independent variable (deposits). The value of 'r' is more than six times PE.r. i.e. $0.876 > 0.366$.

From the above analysis, it can be concluded that though both the banks show positive relationship between deposits and loan and advance, the relationship is highly significant in case of NABIL and the value of (r^2) shows higher percentage of dependency. In case of SCBNL the relationship is less significant and (r^2) shows lower percentage of dependency. It indicates NABIL and SCBNL both have been more successful in utilizing its deposits in a proper manner.

To sum up, the increase in loan and advance is not due to effective mobilization of deposits rather other factors have played a greater role in increase in loan and advances.

ii) Coefficient of correlation between deposit and total investment:

Coefficient of correlation between deposit and total investment measures the degree of relationship between these two variables. Here, the deposit is taken as independent variable (x) and the variable dependent on deposits is total investment, which is denoted by (y). The purpose of calculating 'r' is to judge whether deposits are significantly mobilized as Investments or not.

Table 4.17 shows the value of 'r' (r^2) PEr and 6PEr of NABIL and SCBNL during the study period.

Table 4.17: Correlation between Deposit and Total Investment

Bank	Evaluation Criteria			
	R	R ²	PER	6 PER
NABIL	0.597	0.356	0.164	0.985
SCBNL	0.945	0.894	0.027	0.162

Source: Appendix A3 and A4

The coefficient of correlation 'r' between deposits and total investment in case of NABIL is 0.597, which indicates a positive correlation between deposits and total investment. Coefficient of determination (r^2) is 0.356. This indicates almost 35.6% of variation of the dependent variable has been explained by independent variable. The value of 'r' i.e. 0.597 is less than six times PER. This means that there is not any significant relationship between deposits and total investment.

The coefficient of correlation 'r' between deposits and total investment in case of SCBNL is 0.945, which indicates a positive relationship between the two variables. The coefficient of determination (r^2) is 0.894. This indicates that 89.4% of the variation of the dependent variable has been explained by independent variable. Moreover 'r' is greater than six times P.E.r, which further states that there is a significant relationship between deposits and total investment.

In conclusion, it can be said that both the banks show significant relationship between total deposits and total investment. However, the relationship is more significant in case of SCBNL.

iii) **Coefficient of Correlation between Deposit and Net Profit:**

The coefficient of correlation between deposit and net profit measures the degree of relationship between these two variables. Here, deposit is independent variable (x) and net profit is dependent variable (y).

The main purpose of calculating between these two variables is to justify whether net profit is significantly correlated with deposits or not.

Table 4.19 shows the value of r , r^2 , PEr and 6PEr of NABIL and SCBNL during the study period.

Table 4.18: Correlation between Deposit and Net Profit

Bank	Evaluation Criteria			
	r	r^2	PEr	6PEr
NABIL	0.693	0.481	0.132	0.795
SCBNL	0.958	0.917	0.021	0.127

Source: Appendix A5 and A6

The coefficient of correlation between deposits and net profit in case of NABIL is 0.693, which shows a positive relationship between deposits and net profit. It has been able to increase its net profit with increase in deposit by around RS. 4 billions . The coefficient of determination (r^2) is 0.481, which indicates 48.1% of the variation of the dependent variable (net profit) has been explained by the independent variable (deposits). The value of 6PEr is greater than 'r' i.e. $0.795 > 0.693$. This states that there exists an insignificant relationship between deposits and net profit.

The coefficient of correlation between deposits and net profit in case of SCBNL is 0.958, which indicate 91.7% of the variation of the dependent variable has been explained by the independent variable. The value of 'r' is more than 6PEr i.e. $0.958 > 0.127$, which states that these exists a positive and significant relationship between deposit and net profit.

From the above analysis, it can be concluded that NABIL shows positive relationship or insignificant relationship and SCBNL shows positive relationship between deposit and net profit. The value of (r^2) in case of NABIL shows lower percentage of dependency and the same in case of SCBNL shows higher percentage of dependency. The increase in net profit in case of SCBNL is due to effective mobilization of deposits and other factors have a lesser role to play in increase in net profits. SCBNL has been more successful in mobilizing its deposits to yield higher profits year after year.

iv) **Coefficient of correlation between deposits and interest earned:**

The coefficient of correlation between deposits and interest earned measure the relationship between these two variables. Here deposit is independent variable (x) and interest earned is dependent variable (y). The main objective of calculating 'r' between these two variables is to justify whether deposit is significantly used to earn interest or not.

For the purpose of statistical analysis of the correlation between the deposits and interests earned the present researcher has developed comparative figures in table 4.20.

Table 4.19: Correlation between Deposit and Interest Earned

Bank	Evaluation Criteria			
	r	r ²	PEr	6PEr
NABIL	0.965	0.931	0.0175	0.105
SCBNL	0.50	0.25	0.19	1.15

Source: Appendix A7 and A8

The information in this table reveals that the coefficient of correlation 'r' between deposit and interest earned in case of NABIL is 0.965, which indicates a positive relationship between these variables. When deposits increased, the interest income subsequently increased but when it fell, the interest income also fell. The coefficient of determination (r²) is 0.931, which shows that 93.1% of the variation of dependent variable has been explained by independent variable. The value of six times PEr is less than 'r' i.e. 0.105<0.965. This states that there exists significant relationship between deposit and interest earned.

The coefficient of correlation 'r' between deposit and interest earned in case of SCBNL is 0.50, which projects a positive relationship between these variables. Its interest income has increased with an increase in total deposits. The coefficient of determination (r²) is 0.25, which shows that 25% of the variation of dependent variable has been explained by the independent variable. The value of 'r' i.e. 0.50 is considerably less than six times PEr. This shows that there is insignificant relationship between the interests earned and total deposits.

In conclusion, the relationship between deposit and interest earned in case of NABIL is highly significant with NABIL showing higher percentage of dependency and the relationship between the

variables is insignificant in case of SCBNL. In case of NABIL effective mobilization of deposits has had a major role to play in its earnings where as other factors are responsible in the earnings of SCBNL.

v) **Coefficient of correlation between loan and advances and interest paid:**

The coefficient of correlation between loan and advances and interest paid measures the relationship between these two variables. Here, loan and advances is independent variable (x) and interest paid is dependent variable (y). The purpose of calculating 'r' between these variables is to establish whether increase in loan advances has any role to play in decrease in Interest expenses and vice-versa.

Table 4.20 reveals the values of r, r^2 , PEr and 6PEr of NABIL and SCBNL during the period of study.

Table 4.20: Correlation between Loan and Advances and Interest Paid

Bank	Evaluation Criteria			
	r	r^2	PEr	6PEr
NABIL	0.203	0.0412	0.244	1.47
SCBNL	0.50	0.25	0.19	1.147

Source: Appendix A9 and A10

The calculated values of 'r' of both the banks reflect a negative relationship between loan and advances and Interest paid.

The coefficient of determination (r^2) in case of both the banks shows a lower degree of dependency.

The values of 6PEr is considerably greater than 'r' in both the cases, which states that there does not exist any significant relationship between loan and advances and interest paid during the study period for the above mentioned banks. In conclusion, no relationship could be established between the variables in case of both the banks.

4.2.2 Trend Analysis and Projection for Next Five Years

This is known as time series analysis. The objectives of this analysis are to analyze the trend of deposit collection, its utilization and net profit of NABIL and SCBNL. This topic analyzes the trend of deposits, loan and advances, total investment and net profit and its projection for the next five years the basis of past performance and records available.

The projections are based on the following assumptions:

1. The bank will run in this present position i.e. trend will repeat itself.
2. Other things will remain constant or unchanged.
3. The economy will remain in the present stage.
4. Nepal Rastra Bank will not change its guidelines relating to commercial banks.
5. The forecast will hold true only when the limitation of least square method is carried out.

i) Trend Analysis of Total Deposits Ratios:

Under this topic, based on the trend values of deposit from F/Y 2000/2001 to 2006/2007, an attempt has been made to forecast the projection for next five years, i.e. upto F/Y 2011/2012.

The following table 4.21 shows the trend values of deposits from F/Y 2000/2001 to F/Y 2011/2012 .

Table 4.21: Trend Values of Total Deposit of NABIL and SCBNL

(Rs. Million)

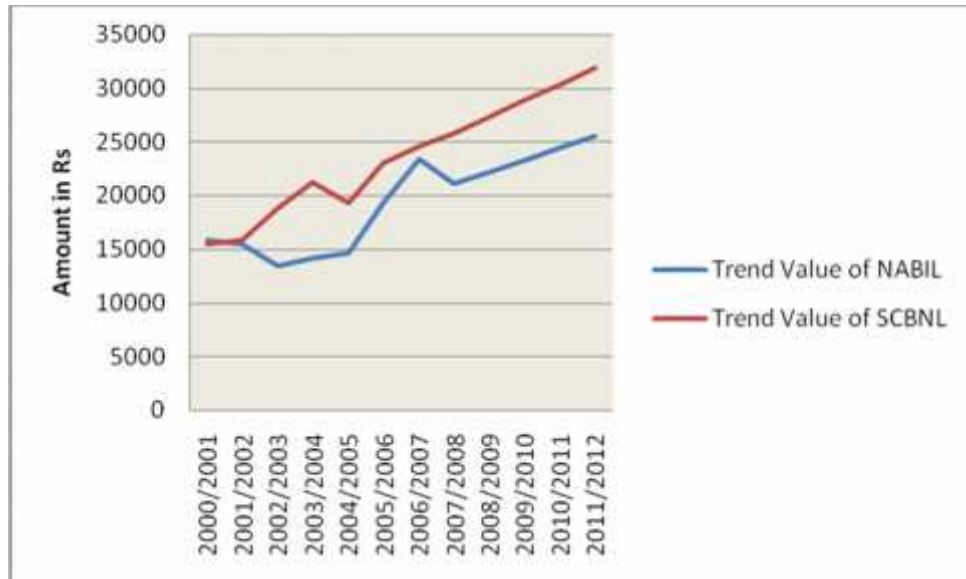
F/Y	Trend Value of NABIL	Trend Value of SCBNL
2000/2001	15839.00	15430.05
2001/2002	15506.43	15835.75
2002/2003	13447.66	18755.63
2003/2004	14119.03	21161.44
2004/2005	14587.00	19335.09
2005/2006	19347.39	23061.03
2006/2007	23342.28	24647.02
2007/2008	21,074.27	25,843.85
2008/2009	22,193.24	27,368.17
2009/2010	23,312.21	28,892.49
2010/2011	24,431.17	30,416.81
2011/2012	25,550.14	31,941.12

Source: Appendix A11 and A12

From the above comparative table, it is clear that trend values of SCBNL is in an increasing trend. If other things remain unchanged the total deposit of NABIL is predicted to be Rs. 25,550.14 million and that of SCBNL to be more than 1.25 times the deposit of NABIL by the end of F/Y 2011/2012 i.e. Rs. 31,941.12 million.

From the above trend analysis, it is quite obvious that SCBNL's deposit collection is proportionately much better than NABIL. The trend values of total deposit of both NABIL and SCBNL are fitted in the trend lines given in diagram 4.1 in the next page.

Diagram 4.1: Trend Values of Total Deposit of NABIL and SCBNL



The diagram illustrates that the deposit amount of NABIL and SCBNL for coming five years. Based on past data, it is seen from diagram that deposit of SCBNL and NABIL will grow drastically in five years making steeper curve .

ii) **Analysis of trend values of loan and advances:**

Here, the trend values of loan and advances of NABIL and SCBNL have been calculated for five years from F/Y 2000/2001 to 2006/2007 and the forecast for next five years. i.e. from F/Y 2007/2008 to F/Y 2011/2012 has been made

Table 4.22 illustrates the statistical information to reveal the trend values of loan and advances of NABIL and SCBNL.

Table 4.22: Trend Values of Loan and Advances of NABIL and SCBNL

(Rs. Million)

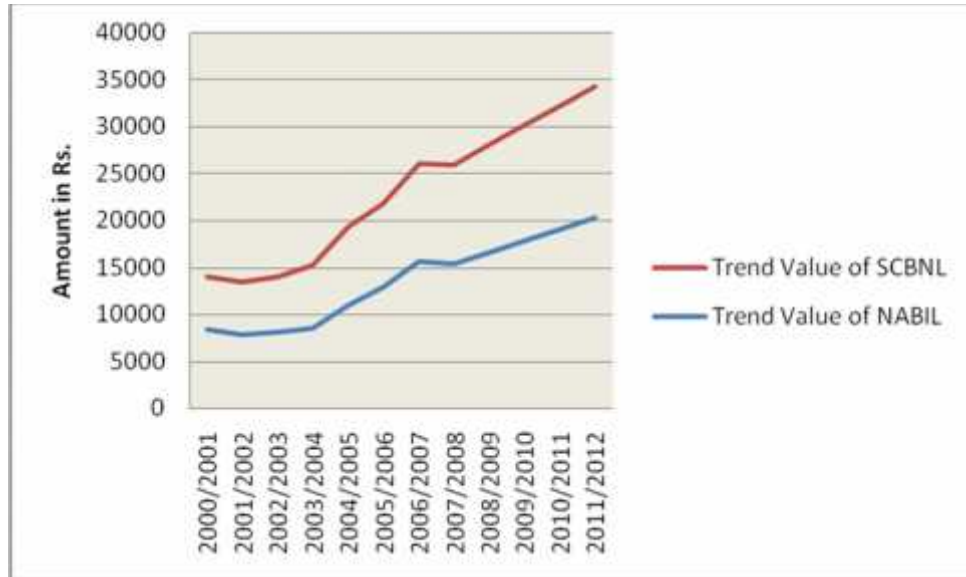
F/Y	Trend Value of NABIL	Trend Value of SCBNL
2000/2001	8324.44	5681.35
2001/2002	7801.85	5696.18
2002/2003	8113.68	6000.16
2003/2004	8548.66	6693.86
2004/2005	10947	8420.86
2005/2006	12922.54	8935.42
2006/2007	15545.78	10502.64
2007/2008	15,277.52	10,756.22
2008/2009	16,518.19	11,590.61
2009/2010	17,758.86	12,425.01
2010/2011	18,999.53	13,259.40
2011/2012	20,240.20	14,093.80

Source: Appendix A13 and A14

The above table clearly shows that the loan and advance of both the banks are in an increasing trend. Assuming that other things will remain constant, the loan and advances of NABIL at the end of F/Y 2011/2012 is predicted to be Rs. 20240.20 million. Similarly, the projection for SCBNL at the end of F/Y 2011/2012 is Rs 14093.80 million.

From the above trend analysis, it is quite clear that NABIL's loan and advances in relation to SCBNL is comparatively higher throughout the trend projection period. The above trend values of loan and advances of NABIL and SCBNL are fitted in the trend line given in diagram 4.2.

Diagram 4.2: Trend Values of Loan and Advances of NABIL and SCBNL



The figure reveals that loan and advances for both banks are in increasing trend. The magnitude of increment is more or less similar so they have made same curve and slope.

iii) Analysis of trend values of total investment:

Under this topic, based on the trend values of Investment from F/Y 2000/2001 to 2006/2007, an attempt has been made to forecast the projections for next five years i.e. up to F/Y 2011/2012.

Table 4.23 shows the trend value investment from F/Y 2000/2001 to F/Y 2011/2012

Table 4.23: Trend Values of Investment of NABIL and SCBNL

(Rs. Million)

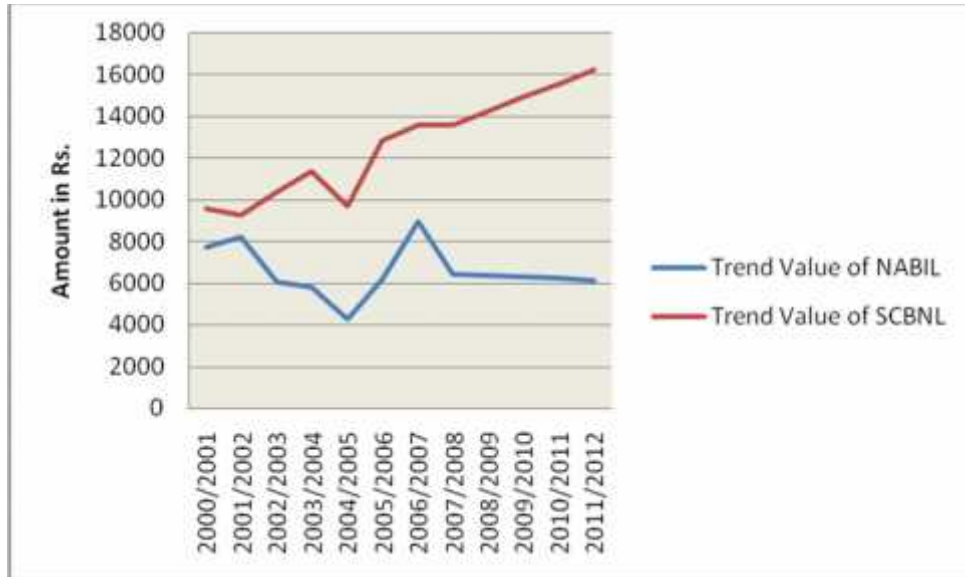
F/Y	Trend Value of NABIL	Trend Value of SCBNL
2000/2001	7704.31	9559.18
2001/2002	8199.51	9275.88
2002/2003	6031.18	10357.68
2003/2004	5835.95	11360.33
2004/2005	4267.23	9702.5
2005/2006	6178.53	12838.55
2006/2007	8945.31	13553.23
2007/2008	6,439.87	13,585.67
2008/2009	6,365.48	14,244.68
2009/2010	6,291.09	14,903.69
2010/2011	6,216.70	15,562.70
2011/2012	6,142.31	16,221.71

Source: Appendix A15 and A16

From the above table it is clear that the trend value of both the banks are in an increasing trend. If other things remain unchanged total investment of SCBNL to be Rs. 16221.71 million. Which is also the highest under the review period.

The above table reveals that SCBNL's total investment is higher than that of NABIL through out the trend projection period. It can be said that SCBNL has followed the policy of maximizing its investment. The above calculated trend values of NABIL and SCBNL are fitted in the trend line given in diagram 4.3.

Diagram 4.3: Trend values of Investment of NABIL and SCBNL



If trend line is drawn for Investment of NABIL and SCBNL, it is found that if present trends continuously occur, then the Investment of NABIL will decline drastically in coming future. This may be due to the low deposit collection by bank and lack of invest able funds. On contrary, trend line predicts that Investment of SCBNL will grow rapidly within coming five years.

iv) **Analysis of trend values of net profit:**

Under this topic, based on the trend values of net profit from F/Y 2000/2001 to 2006/2007, an attempt has been made to forecast the projections for next five years i.e. upto F/Y 2011/2012.

The information presented in table 4.24 communicates the trend value of net profit from F/Y 2000/2001 to F/Y 2011/2012

Table 4.24: Trend Value of Net Profit of NABIL and SCBNL

(Rs. Million)

F/Y	Trend Value of NABIL	Trend Value of SCBNL
2000/2001	291.38	430.83
2001/2002	271.64	479.21
2002/2003	416.24	506.93
2003/2004	455.32	537.8
2004/2005	519	539.2
2005/2006	635.26	658.76
2006/2007	673.96	691.67
2007/2008	748.65	716.90
2008/2009	819.28	758.82
2009/2010	889.92	800.75
2010/2011	960.55	842.67
2011/2012	1,031.18	884.60

Source: Appendix A17 and A18

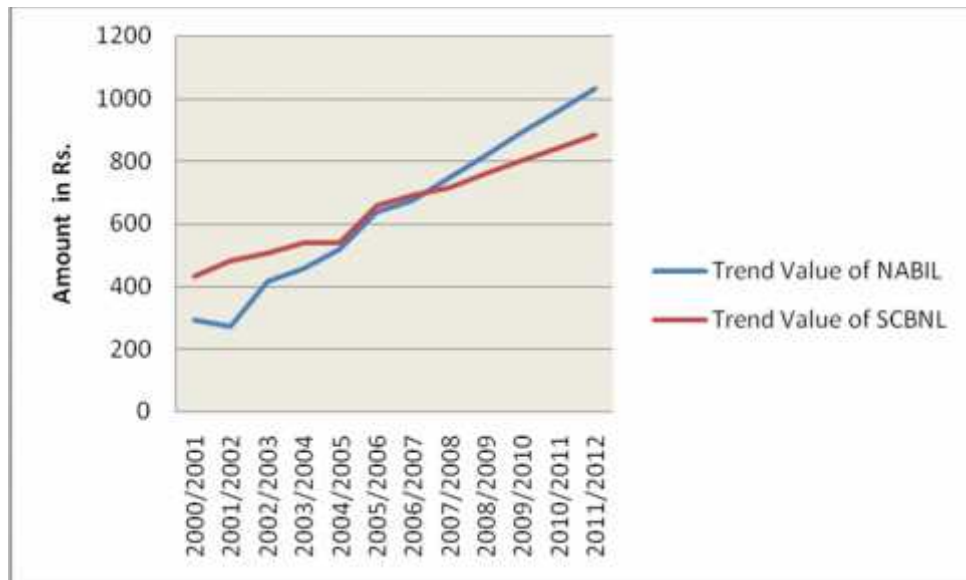
From the above figures, it is clear that the trend values of both the banks are in increasing trend. The trend values of NABIL will be highest in F/Y 2011/2012 i.e. Rs. 1031.18 million. In case of SCBNL net profit will be Rs 884.60 million in F/Y 2011/2012, which is the highest under the review period.

Looking at the trend values, it can be estimated that NABIL would surpass SCBNL in this fiscal itself. It can be said that both the banks have followed the policy of maximizing their net profit.

However, we can draw a conclusion that NABIL has utilized its fund better than SCBNL to earn higher amounts of profit. The above calculated

trend values of net profit of NABIL and SCBNL are fitted in the trend line given in diagram 4.4 below.

Diagram 4.4: Trend values of Net Profit of NABIL AND SCBNL



Trend line for net profit indicates that the net profit of NABIL bank will exceed the net profit of SCBNL in the days ahead. This is so because the profit of NABIL is growing at steeper rate than SCBNL.

4.3 Major Findings of the Study

Having completed the basic analysis required for this study, the final and the most important task of the research is to enlist the findings. This will give meaning to the desired results.

On the basis of various categories of analysis adopted in this study, a comprehensive summary of the major findings of this study is presented below:

1. **Liquidity ratio:**

The liquidity position of NABIL and SCBNL reveals that

- The mean ratio of cash and bank balance to total deposits of SCBNL is slightly higher than NABIL. SCBNL has better liquidity position than NABIL because of high percentage of liquid assets. This shows SCBNL readiness to meet its customer requirement. On the contrary, a high liquidity also indicates the inability of the bank to mobilize its current assets. The ratios of NABIL are more consistent than SCBNL.
- The mean ratio of cash and bank balance to current assets of SCBNL is slightly higher than NABIL. This shows SCBNL's greater capacity to meet its customer's daily cash requirement than NABIL. The ratios of NABIL are less variable and more consistent than SCBNL.
- From the above findings, it is concluded that the liquidity position of SCBNL is comparatively better than NABIL. It has the highest cash and bank balance to total deposit, cash and bank balance to current assets. SCBNL is in a better position to meet its daily cash requirement. NABIL has a higher current ratio, which justifies that it is also capable enough to meet its current obligations. SCBNL's mean investment in Government securities is better than NABIL.

2. **Asset Management ratio:**

On the basis of the study of asset management ratio of NABIL and SCBNL, the results reveal that:

- The mean ratio of loan and advances to total deposit ratio of NABIL is higher than SCBNL. In terms of consistency both have been stable in their ratios.
- The mean ratio of total investment to total deposits of SCBNL is higher than NABIL. The ratios of SCBNL are more consistent and less variable than NABIL.

- The mean ratio of Investment in Government securities to total working fund ratio of SCBNL is higher than NABIL. The ratios of SCBNL are less variable and more consistent than NABIL.
- The mean ratio of Investment in shares and debentures to total working fund ratio of NABIL is slightly higher than SCBNL. NABIL ratios are more variable than that of SCBNL.

From the above findings it may be concluded that NABIL has been more successful in mobilization of its total deposits and working fund as loan and advances. On the other hand, SCBNL appears to be stronger in mobilization of total deposits and working fund as investment in risk free government securities. NABIL has fared better in purchasing shares and debentures of other companies, but both have invested marginal amount under this heading. Both the banks have successfully managed their assets towards different income generation activities.

3. Profitability ratios:

Similarly, the various profitability ratios indicated :

- The mean ratio of return on total loan and advances of SCBNL has been found to be significantly greater than NABIL. The ratios of SCBNL are less variable and more consistent than NABIL.
- The mean ratio of return on total working fund of SCBNL is slightly greater than NABIL. The ratios of NABIL are less consistent and more variable than SCBNL.
- The mean ratio of total interest earned to total operating income of NABIL is higher than SCBNL. Both the banks have been fairly consistent in their ratios.

On these grounds, it may be concluded that SCBNL has been more successful in maintaining its higher return on loan and advances and total

working fund. NABIL has been more successful in mobilization of its funds in interest bearing assets to earn higher interest income than SCBNL. SCBNL is in a better position than NABIL from interest payment point of view. NABIL has paid higher interest than SCBNL, whereas the latter seems to have collected its funds from cheaper sources than NABIL.

4. **Risk ratios:**

The Risk ratios of NABIL and SCBNL reveal that:

- The mean liquidity risk ratio of NABIL is lower than SCBNL.
- The mean credit risk ratio of SCBNL is lower than NABIL. Both the banks have been fairly consistent in their ratios.

Based on above findings, it may be claimed that SCBNL has lower credit risk than NABIL. NABIL has greater exposure to risk in its financial operations than SCBNL.

5. **Growth ratio:**

The results related to growth ratios revealed that:

- The mean growth rate of deposits of SCBNL is significantly higher than NABIL.
- The mean growth rate of total loan and advances of NABIL is higher than SCBNL.
- The mean growth rate of total investment of NABIL is significantly higher than SCBNL.
- The mean growth rate of net profit of NABIL is higher than SCBNL.

Based on the above findings, SCBNL has been more successful in increasing its deposits, and investment during the study period, whereas, NABIL has been more efficient in terms of increasing its loans and advances and net profit.

6. **Co-efficient of correlation analysis:**

The coefficients of correlation analysis between different variables of NABIL and SCBNL reveal that:

- NABIL has a higher value of coefficient of correlation between deposits and loan and advances than SCBNL.
- The co-efficient of correlation between deposits and total investment of SCBNL is slightly higher than NABIL.
- The co-efficient of correlation between deposit and net profit in case of SCBNL is higher than NABIL
- The coefficient of correlation between deposits and interest earned in case of NABIL is higher than SCBNL.
- The coefficient of correlation between total loans and advances and interest paid is higher in SCBNL than that of NABIL

In conclusion, there is significant relationship between deposit and loan and advances, deposits and total investment, deposits and net profit in case of SCBNL, and the relationship is insignificant between deposit and interest earned, loan and advances and interest paid.

In case of NABIL, there exists significant relationship between deposits and total loan and advances, deposits and interest earned, whereas the relationship is insignificant between deposit and net profit, deposit and interest earned, loan and advances and interest paid, deposits and total investment.

7. **Trend analysis and projection for next five years:**

The trends analysis of deposits, loan and advances, total investment and net profit and its projection for next five years of NABIL and SCBNL reveals that:

- The deposits of SCBNL have an increasing trend while NABIL'S trend values have a fluctuating trend. The total deposit of NABIL is predicted to be Rs. 25,550.14 million and that of SCBNL to be

Rs.31,941.12 million at the end of F/Y 2011/2012. The deposit collection of SCBNL is much better than NABIL.

- The loan and advance of both the banks have an increasing trend. The total loan and advance of NABIL is predicted to be Rs. 20240.2 million and that of SCBNL to be Rs. 14093.80 million at the end of F/Y 2011/2012. The trend of loan and advances of NABIL is much better compared to SCBNL.
- The total investments of SCBNL have formed an increasing trend while it is exactly the opposite in case of NABIL. SCBNL seems to have a much-focused policy with regards to total investment than NABIL.
- The net profits of both the banks are in an increasing trend. The net profit of NABIL and SCBNL is predicted at Rs. 1031.18 million and Rs. 884.6 million respectively by the end of F/Y 2011/2012. The position of NABIL with regard to utilization of the fund to earn profit is better than SCBNL.

The liquidity position of SCBNL is better than NABIL. The cash and bank balance of SCBNL w.r.t. deposits is greater than NABIL. The cash and bank balance of SCBNL w.r.t. current assets is higher than NABIL. From the point of view of profitability, NABIL seems to be more successful than SCBNL w.r.t. Profit earning capacity by utilizing available resources. The credit risk of SCBNL is comparatively lower than NABIL. NABIL has more exposure to risk than SCBNL. SCBNL has been successful in maintaining a steady growth rate on deposits, investments and loan and advances year after year.

CHAPTER -V

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

This chapter presents with the summary, conclusions, and recommendations for corrective measures to be undertaken by the concerned institutions. The first part of the chapter briefly summarizes the total study in respect with the general introduction of the study, various theoretical and application-associations of the present study, study methodology, and key findings of the study. The second part of the chapter deals with the present researcher's conclusions drawn in the basis of this research. Finally, the recommendations have been presented in the third section of the chapter.

As an exploratory research, the present study attempts to develop comparative analysis of the financial performance of two joint venture banks, viz. NABIL and SCBNL in respect with their investment in government securities. The total study has been based on the available final accounts of the concerned banks. For the purpose of the analysis, the financial information of the seven consecutive years has been taken into account of the study.

This study reveals that the current ratio of both the banks is greater than one, which should be considered satisfactory. The liquidity position of SCBNL is better than NABIL. The cash and bank balance of SCBNL with respect to deposits is greater than NABIL. This puts, SCBNL in a better position with respect to meeting customer requirement than NABIL. In contrast, a high ratio of non-earning cash and bank balance is an indication of bank's inability to invest its fund in income generation areas. The cash and bank balance of SCBNL with respect to current assets is higher than NABIL. This shows greater capacity of SCBNL to meet its customer's cash requirement but that does not mean NABIL

cannot meet its daily customer cash requirement. SCBNL needs to invest its funds in more productive sectors.

SCBNL has invested more portions of its current assets and total working fund in government securities than NABIL. This is due to lack of other secured and profitable investment sector, whereas NABIL has invested more of its fund in other productive sectors. NABIL has invested more of its funds in purchasing shares and debentures of other companies than SCBNL.

From the point of view of profitability, NABIL seems to be more successful than SCBNL with respect to profit earning capacity by utilizing available resources. NABIL has also been more successful in terms of interest earning power. It has been more successful in mobilizing its funds in interest bearing assets to earn higher interest income. SCBNL is in a better position to meet its interest expenses as it has collected its fund from cheaper sources than NABIL.

The liquidity risk and credit risk of SCBNL is comparatively lower than NABIL. NABIL has more exposure to risk than SCBNL.

SCBNL has been successful in maintaining a steady growth rate on deposits, investments and loan and advances year after year. The average growth rate of net profit of NABIL is higher than SCBNL. SCBNL's growth in deposits can be accounted to its credibility, image and high quality service.

From the analysis of coefficient of correlation, we can say that both the banks show positive relationship between deposit and loan and advances, deposits and total investment. There exists a positive relationship between deposits and net profit, outside assets and net profit in case of SCBNL and also between deposits and interest earned in case of NABIL.

SCBNL has insignificant relationship between deposits and interest earned, loan and advances and interest paid.

There is an insignificant relationship between deposits and net profit in case of NABIL.

The trend value of loan and advances, net profits of NABIL and SCBNL are in an increasing trend. The trend values of deposits and investment of SCBNL are proportionately higher than NABIL in all the years. The trend value of loan and advances of NABIL is proportionately better than SCBNL in all the years.

5.2 Conclusions

The study results reveal that there exists difference between the JVBs in relation to their capacity to meet the customer's cash requirement. The individual bank's investment behavior also shows that the banks are not equally prioritizing the investment policies, as a result, some of them invest heavily on government securities yielding less returns on total investment. On the basis of this study, it also can be concluded that the banks are not equally competent to select the credit risk areas as professional financial institutions. There exists a significant relationship between deposits and interest earned, loan and advances and interest paid, but the JVBs lack using their maximum risk taking potential so as to make themselves more productive institutions. The trends value of loan and advances, net profits are in an increasing pattern, it could be as a result of the banks' limited risk taking behavior over the time.

5.3 Recommendations

On the basis of the present study, following recommendations have been deducted for necessary policy improvements in respect with investment policies of the JVBs in Nepal:

- **Deposits:** SCBNL, backed by its credibility and high quality service has been able to increase its deposit collection consistently. While other banks are coming up with a host of measures to increase their deposits, NABIL's strategy of selective shedding of unprofitable deposits seems off the tune. NABIL is recommended to rethink its strategy and collect more deposits. Since the past few years, banks have been targeting depositors through a large variety of deposit schemes and facilities. NABIL, itself introduced a saving plus deposit scheme a few years back to target high-end depositors, but the growth in deposits does not look convincing. Like others, it also needs to come up with various incentives, schemes, and facilities to increase deposits. As of now, the minimum balance required to operate an account is Rs. 25,000, which is too high. The minimum balance ceiling should be brought down to attract small depositors and entrepreneurs.

- NABIL has so far been providing ATM facilities through its own premises. The ATM facilities need further expansion. For this, bank needs to identify potential locations.

- **Investment in productive sectors:** SCBNL has given more priority to invest its fund in government securities and depositors' money has been less utilized as loan and advances. Though securities issued by government are risk free but such instruments yield lower interest rate. SCBNL should identify less risky and profitable investment sectors and invest in them. SCBNL has been following a wait, watch and act policy towards investment in productive sectors for a long time. Despite the uncertain security and political situation in the country, the macro-economic indicators are good. Once the political and security conditions improve, a good turn-around in the economy is expected and unless SCBNL quickly acts it might be left behind in the race.

- **Consumer lending:** Currently the size of the consumer lending market is estimated at Rs. 10 billion (Himalayan News Services, March 28). Housing and vehicle finance have become two important and viable sectors with minimum risk. However, the market has not been fully exploited. Retail lending of EBL alone accounts for 20 percent of the total loan portfolio, which is the highest among the commercial banks in Nepal. The sale of automobiles recorded a two-digit growth in the past five years and the real estate business, especially in urban areas is doing much better, thanks to consumer financing. Both NABIL and SCBNL are recommended to increase their investment in consumer loan sector by offering competitive interest rates.

- **Investment in share and debentures:** Both the banks have invested nominal percentage of its funds in shares and debentures of other companies. They are recommended to invest more in shares and debentures of financial and non-financial companies across different sectors including government corporations. This will encourage overall economic development of the country.

- **Investment in deprived and priority sectors:** NRB has directed the banks to extend a certain percentage of loan and advances to the deprived and priority sector. Both the banks are recommended to adhere to the directives issued by NRB and invest more in these sectors. NRB should also speed up its supervision and monitoring in this regard. It should ensure that such directives are put into practice in letter and spirit.

- **Margin lending:** The introduction of margin lending by NBL at 6.5% per annum against shares of selected companies can be viewed as a new opportunity for investment. Bank sources claim to have already disbursed over Rupees 2.5 billion in a one and a half year period to margin customers. Since NABIL and SCBNL have sound liquidity position and also as their cost

of fund is lower, the banks could embark on margin lending after conducting appropriate feasibility study.

- **Portfolio management:** Portfolio management refers to the allocation of funds into different components of its assets, having different degree of risk and varying rate of return in such a manner that the conflicting goals of maximum yield and minimum risk can be achieved. The portfolio condition of the banks should be regularly revised from time to time. Appointing an investment specialist as a portfolio manager or assigning the task of portfolio management to Manager Finance and Planning could prove beneficial.
- **OBS operation:** The fee-based activities include commission, discount and fees. They yield high return to the bank. NABIL is not in a better position with regard to income from off-balance sheet activities. It is recommended to enhance off-balance sheet operations as well.
- **Branches in rural areas:** Integrated and speedy development of the country is possible only when competitive banking services reaches nooks and corners of the country. NABIL and SCBNL have shown no interest to open branches in rural areas. Both the banks are recommended to expand their branches and banking services and facilities in rural areas and communities to accelerate their economic development. NRB should implement policies to encourage banks, which provide extensive services while penalizing those who are not responsive to the banking needs of the community, including the underprivileged.
- **Further studies:** The present researcher strongly feels the need of conducting a series of more detailed, professional as well as academic research studies focusing in this subject matter to make the issue more clear.

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www.nrb.org.np

www.nepalstock.com.np

Appendix -1

Profile of Concerned Banks

NABIL Bank Ltd.

NABIL Bank Ltd. (erstwhile Nepal Arab Bank Ltd.) was established on July 12th 1984 under a technical service agreement with Dubai Bank Ltd., Dubai, which was later, merged with Emirate Bank Ltd., Dubai. NABIL is the first and major joint venture bank in the country with key points of representation all over Nepal. The bank is managed by a team of qualified and highly experienced professionals.

The shareholding are distributed as follows:

- 50% is owned by N.B. International Limited, Ireland.
- 20% is owned by local financial institutions and
- 30% by the Nepalese public.

NABIL is amongst the most successful joint venture organizations in Nepal registering strong growth in balance sheet footing as well as profits year after year. The initial capital of Rs. 30 million, invested in 1984, has grown to Rs 2056 million as at mid July 2007.

The bank has been a pioneer in introducing modern banking and numerous innovative products into Nepal. It was the first to introduce consortium finance in Nepal. NABIL is the sole banker to a multitude of International Aid Agencies, NGO's, Embassies and consulates in the Kingdom, which is a compliment to its image and servicing capabilities. NABIL was the first bank to issue credit card in Nepal. NABIL has correspondent banking relationship with banks in 47 countries. NABIL is a member of SWIFT. It has also been providing ATM facilities to its account holders.

Standard Chartered Bank Nepal Ltd.

Nepal Grindlays Bank Ltd. (recently named Standard Chartered Bank Nepal Ltd.) was established in 1987 A.D. as a joint venture bank with 50% of the equity share capital originally owned by ANZ Grindlays Bank, UK that managed and controlled overall activities of the bank. The bank has made significant contribution in the Nepalese banking sector since its inception.

In August 2000, the ownership of ANZ Grindlays Bank, U.K. was transferred to SCB, Australia. Since then, the bank is being managed and controlled by SCBL Australia, as Standard Chartered Bank Nepal Ltd. (SCBNL) in Nepal. SCBL holds 50% of total equity capital investment. Out of 35% of the total equity share capital that was held by NBL, Standard Chartered Bank, UK, now has bought 25%. The general public holds the remaining 25% shares.

The bank is being managed under joint venture & technical services agreement (T.S.A.) signed between SCB and Nepalese promoters. The bank has been providing various banking services to its customers through its branches nation wide. It has four branches including its main branch /corporate office in the Kathmandu valley. The bank is well equipped with the latest technology in the banking sector. It leads the Nepalese list in the best 500 banks of Asia as voted by Fortune magazine. It has some of the best banking professionals in the banking industry in Nepal.

Some of the facilities are listed below.

- Tele-banking
- Credit Card facilities
- Foreign Currency Transaction
- Automated Teller Machines
- Personalized & Corporate Financial services
- SWIFT, TELEX
- Western Union Money Transfer
- Money Gram

The present capital structure of SCBNL is shown below.

	(Rs. in million)
Authorized equity share central	1000.00
Issued Capital	500.00
Paid up Capital	413.25

Source: Annual Report of SCBNL 2006/2007.

Appendix -2
NABIL BANK LTD

(Rs in million)

S.N.	F/Y	2000/01	20001/02	20002/03	2003/04	2004/05	2005/06	2006/07
1	Current Assets	18098.96	17732.35	16644.97	16742.67	17027.75	22010.97	26967.39
2	Current Liabilities	17226.20	16482.82	15248.44	15263.80	15528.69	20455.63	25197
3	Cash and Bank Balance	812.91	1051.82	1144.77	970.49	559.38	556.16	1383.81
4	Total Investment	7704.31	8199.51	6031.18	5835.95	4267.23	6178.53	8945.31
5	Total Deposit	15839	15506.43	13447.66	14119.03	14587	19347.39	23342.28
6	Loan and Advances	8324.44	7801.85	8113.68	8548.66	10947	12922.54	15545.77
7	Investment in Government Securities	2732.96	4120.30	3588.77	3672.63	2413	2301.46	4808.35
8	Investment on Shares and Debenture.	18.82	22.22	22.22	22.22	27.36	27.56	57.85
9	Total Working Fund	18367.15	17993.20	16668.44	17104.27	17546.89	22688.33	27620.56
10	Total Interest Earned	1266.70	1120.18	1017.87	1001.62	1068.74	1309.99	1587.75
11	Total Interest Paid	578.36	462.08	317.35	282.95	2.43.54	357.16	555.71
12	Net Profit	291.38	271.64	416.24	455.32	520.11	635.26	673.96
13	Operating Income	1573.33	1639.12	1340.50	1333.65	1438.44	1750.44	2092.81

Source: Annual Report 2000/01 to Annual Report 2006/07

Appendix –3

STANDARD CHARTERED BANK NEPAL LTD.

(Rs. in million)

S.N	F/Y	2000/01	20001/02	20002/03	2003/04	2004/05	2005/06	2006/07
1	Current Assets	19224.2 0	18663.02	21101.94	23778.25	22086.48	24097.83	26987.47
2	Current Liabilities	18245.1 8	17207.63	19631.60	22146.32	20311.16	23530	25274
3	Cash and Bank Balance	961.05	825.26	1512.30	2023.16	1111.11	1029.25	1992.17
4	Total Investment	9559.18	9275.88	10357.68	11360.33	9702.5	12838.55	13553.23
5	Total Deposit	15430.0 5	15835.75	18755.63	21161.44	19335.09	23061.03	24647.02
6	Loan and Advances	5681.35	5696.18	60001.16	6693.86	8420.86	8935.42	10502.64
7	Investment in Government Securities	4811.01	5784.72	6722.83	7948.22	7203.06	8635.88	7107.93
8	Investment on Share and Debenture	11.195	11.195	11.195	11.195	13.348	15.34	44.94
9	Total Working Fund	19357.2	18775.27	21304.84	23925.68	22171.24	26305.11	29165.45
10	Total Interest earned	1242.92	1013.64	1001.36	1042.18	1058.67	1189.60	1411.98
11	Total Interest paid	474.4	299.86	255.15	275.81	254.13	303.19	413.05
12	Net profit	430.83	479.21	506.93	537.8	539.20	658.76	691.67
13	Operating Income	1640.26	1446.81	1503.60	1521.16	1573.32	1775.44	2000.62

Source: Annual Report 2000/01 to Annual Report 2006/07

Appendix –4
NABIL BANK LTD

Cash and Bank Balance to Total Deposit Ratio

<i>F/Y</i>	<i>Cash & Bank Balance</i>	<i>Total Deposit</i>	<i>Percentage</i>
2000/2001	812.91	15839.00	5.13
2001/2002	1051.82	15506.43	6.78
2002/2003	1144.77	13447.66	8.51
2003/2004	970.49	14119.03	6.87
2004/2005	559.38	14587.00	3.83
2005/2006	556.16	19347.00	2.87
2006/2007	1383.81	23342.00	5.93

STANDARD CHARTERED BANK NEPAL LTD

Cash and Bank Balance to Total Deposit Ratio

<i>F/Y</i>	<i>Cash & Bank Balance</i>	<i>Total Deposit</i>	<i>Percentage</i>
2000/2001	961.05	15430.05	6.23
2001/2002	825.26	15835.75	5.21
2002/2003	1512.30	18755.63	8.06
2003/2004	2023.13	21161.44	9.56
2004/2005	1111.11	19,335.09	5.75
2005/2006	1029.25	23061.03	4.46
2006/2007	1992.17	24647.02	8.08

Appendix –5
NABIL BANK LTD

Cash and Bank Balance to Current Asset

<i>F/Y</i>	<i>Cash & Bank Balance</i>	<i>Current Asset</i>	<i>Percentage</i>
2000/2001	812.91	18098.96	4.49
2001/2002	1051.82	17732.35	5.93
2002/2003	1144.77	16644.97	6.88
2003/2004	970.49	16742.67	5.80
2004/2005	559.38	17027.75	3.29
2005/2006	556.16	22010.97	2.53
2006/2007	1383.81	26967.39	5.13

STANDARD CHARTERED BANK NEPAL LTD

Cash and Bank Balance to Current Asset

<i>F/Y</i>	<i>Cash & Bank Balance</i>	<i>Current Asset</i>	<i>Percentage</i>
2000/2001	961.05	19224.20	5.00
2001/2002	825.26	18663.20	4.42
2002/2003	1512.30	21101.94	7.17
2003/2004	2023.16	23778.25	8.51
2004/2005	1111.11	22086.48	5.03
2005/2006	1029.25	24097.83	4.27
2006/2007	1992.17	26987.47	7.38

Appendix -6

NABIL BANK LTD

Loan and Advances to Total Deposit Ratio

<i>F/Y</i>	<i>Loan and Advance</i>	<i>Total Deposit</i>	<i>Percentage</i>
2000/2001	8324.44	15839.00	52.56
2001/2002	7801.85	15506.43	50.31
2002/2003	8113.68	13447.66	60.34
2003/2004	8548.66	14119.03	60.55
2004/2005	10947.00	14587.00	75.05
2005/2006	12922.54	19347.39	66.79
2006/2007	15545.77	23342.28	66.60

STANDARD CHARTERED BANK NEPAL LTD

Loan and Advances to Total Deposit Ratio

<i>F/Y</i>	<i>Loan and Advances</i>	<i>Total Deposit</i>	<i>Percentage</i>
2000/2001	5681.35	15430.05	36.82
2001/2002	5696.18	15835.75	35.97
2002/2003	6000.16	18755.63	32.00
2003/2004	6693.86	21161.44	31.63
2004/2005	8420.86	19335.09	43.55
2005/2006	8935.42	23061.03	38.75
2006/2007	10502.64	24647.02	42.61

Appendix –7
NABIL BANK LTD

Total Investment to Total Deposit Ratio

<i>F/Y</i>	<i>Total Investment</i>	<i>Total Deposit</i>	<i>Percentage</i>
2000/2001	7704.31	15839	48.64
2001/2002	8199.51	15506.43	52.88
2002/2003	6031.18	13447.66	44.85
2003/2004	5835.95	14119.03	41.33
2004/2005	4267.23	14587.00	29.25
2005/2006	6178.53	19347.39	31.93
2006/2007	8945.31	23342.28	38.32

STANDARD CHARTERED BANK NEPAL LTD

Total Investment to Total Deposit Ratio

<i>F/Y</i>	<i>Total Investment</i>	<i>Total Deposit</i>	<i>Percentage</i>
2000/2001	9559.18	15430.05	61.95
2001/2002	9275.88	15835.05	58.58
2002/2003	10357.68	18755.63	55.22
2003/2004	11360.33	21161.44	53.68
2004/2005	9702.55	19335.09	50.18
2005/2006	12838.55	23061.03	55.67
2006/2007	13553.23	24647.02	54.99

Appendix –8
NABIL BANK LTD

Investment in Government Securities to Total Working Fund Ratio

<i>F/Y</i>	<i>Investment in Government Securities</i>	<i>Total Working Fund</i>	<i>Percentage</i>
2000/2001	2732.96	18367.15	14.88
2001/2002	4120.30	17993.20	22.90
2002/2003	3588.77	16668.44	21.53
2003/2004	3672.63	17104.27	21.47
2004/2005	2413.00	17546.89	13.75
2005/2006	2301.46	22688.33	10.14
2006/2007	4808.34	27620.38	17.41

STANDARD CHARTERED BANK NEPAL LTD

Investment in Government Securities to Total Working Fund Ratio

<i>F/Y</i>	<i>Investment in Government Securities</i>	<i>Total Working Fund</i>	<i>Percentage</i>
2000/2001	4811.01	19357.2	24.85
2001/2002	5784.72	18775.27	30.81
2002/2003	6722.83	21304.84	31.56
2003/2004	7948.22	23925.68	33.22
2004/2005	7203.06	22171.24	32.49
2005/2006	8635.88	26305.31	32.83
2006/2007	7107.94	29165.45	24.37

Appendix -9

NABIL BANK LTD

Investment in Share & Debentures to Total Working Fund Ratio

<i>F/Y</i>	<i>Investment in Share & Debenture</i>	<i>Total Working Fund</i>	<i>Percentage</i>
2000/2001	18.82	18367.15	0.102
2001/2002	22.22	17993.20	0.124
2002/2003	22.22	16668.44	0.134
2003/2004	22.22	17104.27	0.130
2004/2005	27.36	17546.89	0.156
2005/2006	104.18	22688.33	0.459
2006/2007	286.95	27620.38	1.039

STANDARD CHARTERED BANK NEPAL LTD

Investment in Share & Debentures to Total Working Fund Ratio

<i>F/Y</i>	<i>Investment in Share & Debenture</i>	<i>Total Working Fund</i>	<i>Percentage</i>
2000/2001	11.195	19357.2	0.058
2001/2002	11.195	18775.27	0.060
2002/2003	11.195	21304.84	0.053
2003/2004	11.195	23925.68	0.047
2004/2005	13.348	22171.24	0.060
2005/2006	15.34	26305.31	0.058
2006/2007	44.94	29165.45	0.154

Appendix -10
NABIL BANK LTD

Return on Loan and Advances Ratio

<i>F/Y</i>	<i>Net Profit</i>	<i>Loan and Advances</i>	<i>Percentage</i>
2000/2001	291.38	8324.44	3.50
2001/2002	271.64	7801.85	3.48
2002/2003	416.24	8113.68	5.13
2003/2004	455.32	8548.66	5.33
2004/2005	519.00	10947.00	4.74
2005/2006	635.26	12922.54	4.91
2006/2007	673.96	15545.77	4.34

STANDARD CHARTERED BANK NEPAL LTD

Return on Loan and Advances Ratio

<i>F/Y</i>	<i>Net Profit</i>	<i>Loan and Advances</i>	<i>Percentage</i>
2000/2001	430.83	5681.18	7.58
2001/2002	479.21	5696.18	8.41
2002/2003	506.93	6000.16	8.45
2003/2004	537.80	6693.86	8.03
2004/2005	539.20	8420.86	6.40
2005/2006	658.76	8935.42	7.37
2006/2007	691.67	10502.64	6.58

Appendix -11
NABIL BANK LTD

Return on Total Working Fund Ratio

<i>F/Y</i>	<i>Net profit</i>	<i>Total Working Fund</i>	<i>Percentage</i>
2000/2001	291.38	18367.15	1.59
2001/2002	271.64	17993.20	1.51
2002/2003	416.24	16668.44	2.50
2003/2004	455.32	17104.27	2.66
2004/2005	519.00	17546.89	2.96
2005/2006	635.26	22688.33	2.80
2006/2007	673.96	27620.38	2.44

STANDARD CHARTERED BANK NEPAL LTD

Return on Total Assets Ratio

<i>F/Y</i>	<i>Net profit</i>	<i>Total Working Fund</i>	<i>Percentage</i>
2000/2001	430.83	19357.2	2.23
2001/2002	479.21	18775.27	2.55
2002/2003	506.93	21304.84	2.38
2003/2004	537.8	23925.68	2.25
2004/2005	539.20	22171.24	2.43
2005/2006	658.76	25767.35	2.56
2006/2007	691.67	28596.68	2.42

Appendix -12

NABIL BANK LTD

Total Interest Earned to Total Operating Income Ratio

<i>F/Y</i>	<i>Total Interest Earned</i>	<i>Total Operating Income</i>	<i>Percentage</i>
2000/2001	1266.70	1573.33	80.51
2001/2002	1120.18	1639.12	68.34
2002/2003	1017.87	1340.50	75.93
2003/2004	1001.62	1333.65	75.10
2004/2005	1068.74	1438.44	74.30
2005/2006	1309.99	1750.44	74.84
2006/2007	1587.75	2092.81	75.87

STANDARD CHARTERED BANK NEPAL LTD

Total Interest Earned to Total Operating Income Ratio

<i>F/Y</i>	<i>Total Interest Earned</i>	<i>Total Operating Income</i>	<i>Percentage</i>
2000/2001	1242.92	1640.26	75.78
2001/2002	1013.64	1446.81	70.06
2002/2003	1001.36	1503.60	66.60
2003/2004	1042.18	1521.16	68.51
2004/2005	1058.67	1573.32	67.29
2005/2006	1189.60	1775.44	67.00
2006/2007	1411.99	2000.62	70.58

Appendix A - 1
NABIL
Correlation between Total Deposit and Loan and Advances.

F/Y	Deposit (X)	Loan and Advance (Y)	X=(x- \bar{x}) (x-16598.40)	x ²	y = (y- \bar{y}) (y-)	Y ²	XY
00/01	15839.00	8324.44	-759.4	576688.2	-1990.408	3961724.01	1511515.64
01/02	15506.43	7801.85	-1091.97	1192398	-2512.998	6315158.95	2744118.17
02/03	13447.66	8113.68	-3150.74	9927162	-2201.168	4845140.56	6935307.84
03/04	14119.03	8548.66	-2479.37	6147275	-1766.188	3119420.05	4379033.36
04/05	14587.00	10947.00	-2011.4	4045730	632.152	399616.151	-1271510.47
05/06	19347.39	12922.54	2748.99	7556947	2607.692	6800057.57	7168519.49
06/07	23342.28	15545.77	6743.89	45480052	5230.922	27362545	35276762.6
	$\phi x =$ 116188.8	$\phi y =$ 72203.94		$\phi x^2 =$ 74926251.9		$\phi y^2 =$ 52803662.26	$\phi xy =$ 56743746.61

Here, N = 5

$$\bar{X} = \frac{\sum X}{N} = \frac{116188.8}{7} = 16598.40$$

$$\bar{y} = \frac{\sum y}{N} = \frac{72203.94}{7} = 10314.85$$

We have,

$$\phi x^2 = 74926251.9$$

$$\phi y^2 = 52803662.26$$

$$\phi xy = 56743746.61$$

Calculation of correlation coefficient (r) :

$$r = \frac{\sum xy}{\sqrt{\sum x^2} \sqrt{\sum y^2}}$$

$$r = \frac{56743746.61}{\sqrt{74926251.9} \sqrt{52803662.26}} = 0.9021$$

$$\text{or } r = 0.9021$$

$$r^2 = 0.8137$$

Calculation of Probable error,

$$P. Er. = 0.6745 \frac{1 - r^2}{\sqrt{N}} = 0.047$$

$$\text{Or } P. Er = 0.047$$

$$6. P. Er. = 0.285$$

Appendix A - 2
SCBNL
Correlation between Total Deposit and Loan and Advances.

F/Y	Deposit (X)	Loan and Advance (Y)	X=(x- \bar{x}) (x-18103.59)	x ²	y = (y- \bar{y}) (y-6498.68)	Y ²	XY
00/01	15430.05	5681.35	-4316.52	18632344.9	-1737.43	3018663	7499651.34
01/02	15835.75	5696.18	-3910.82	15294513.1	-1722.6	2967350.76	6736778.53
02/03	18755.63	6001.16	-990.94	981962.084	-1417.62	2009646.46	1404776.36
03/04	21161.44	6693.86	1414.87	2001857.12	-724.92	525509.006	-1025667.56
04/05	19335.09	8420.86	-411.48	169315.79	1002.08	1004164.33	-412335.878
05/06	23061.03	8935.42	3314.46	10985645.1	1516.64	2300196.89	5026842.61
06/07	24647.02	10502.64	4900.45	24014410.2	3083.86	9510192.5	15112301.7
	$\phi x =$ 138226	$\phi Y =$ 51931.47		$\phi x^2 =$ 72080048.27		$\phi y^2 =$ 21335722.95	$\phi xy =$ 34342347.15

Here, N = 5

$$\bar{X} = Ex/N = 138226/7 = 19746.57$$

$$\bar{y} = Ey/N = 51931.47/7 = 7418.78$$

We have,

$$\phi x^2 = 72080048.27$$

$$\phi y^2 = 21335722.95$$

$$\phi xy = 34342347.15$$

Calculation of correlation coefficient (r) :

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = 34342347.15/39215812.37 = 0.8757270$$

$$\text{or } r = 0.876$$

$$r^2 = 0.767$$

Calculation of Probable error,

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$\text{Or, } P. Er. = 0.0594$$

$$6 P. Er. = 0.357$$

Appendix A - 3
NABIL
Correlation between Total Deposit and Total Investment.

F/Y	Deposit (X)	Total Investment(Y)	X=(x- \bar{x}) (x-14699.82)	x ²	y = (y- \bar{y}) (y-6407.64)	Y ²	XY
00/01	15839.00	7704.31	-759.40	576686.19	966.8785714	934854.172	-734246.206
01/02	15506.43	8199.51	-1091.97	1192395.36	1462.078571	2137673.75	-1596543.85
02/03	13447.66	6031.18	-3150.74	9927153.55	-706.2514286	498791.08	2225213.62
03/04	14119.03	5835.95	-2479.37	6147268.51	-901.4814286	812668.766	2235104.72
04/05	14587.00	4267.23	-2011.40	4045724.21	-2470.201429	6101895.1	4968559.62
05/06	19347.39	6178.53	2748.99	7556953.87	-558.9014286	312370.807	-1536415.24
06/07	23342.28	8945.31	6743.88	45479936.7	2207.878571	4874727.79	14889671.3
	$\phi x =$ 116188.8	$\phi Y =$ 47162.02		$\phi x^2 =$ 74926118.42		$\phi y^2 =$ 15672981.46	$\phi xy =$ 20451343.97

Here, N = 7

$$\bar{X} = \frac{\sum X}{N} = \frac{116188.8}{7} = 16598.40$$

$$\bar{y} = \frac{\sum y}{N} = \frac{47162.02}{7} = 6737.431$$

We have,

$$\phi x^2 = 74926118.42$$

$$\phi y^2 = 15672981.46$$

$$\phi xy = 20451343.97$$

Calculation of correlation coefficient (r) :

$$r = \frac{\phi xy}{\sqrt{\phi x^2} \sqrt{\phi y^2}}$$

$$r = \frac{20451343.97}{\sqrt{74926118.42} \sqrt{15672981.46}} = 0.597$$

or, r = 0.597

$$r^2 = 0.356$$

Calculation of Probable error,

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

Or, P. Er. = 0.164

6 P. Er. = 0.985

Appendix A - 4
SCBNL
Correlation between Total Deposit and Total Investment.

F/Y	Deposit (X)	Total Investment (Y)	X=(x- \bar{x}) (x-18103.59)	x ²	y = (y- \bar{y}) (y-10051.11)	Y ²	XY
00/01	15430.05	9559.18	-4316.52	18632369.6	-1390.441429	1933327.37	6001872.21
01/02	15835.75	9275.88	-3910.82	15294535.4	-1673.741429	2801410.37	6545706.24
02/03	18755.63	10357.68	-990.94	981967.746	-591.9414286	350394.655	586580.13
03/04	21161.44	11360.33	1414.87	2001849.03	410.7085714	168681.531	581098.063
04/05	19335.09	9702.5	-411.48	169318.142	-1247.121429	1555311.86	513169.089
05/06	23061.03	12838.55	3314.46	10985626.2	1888.928571	3568051.15	6260772.8
06/07	24647.02	13553.23	4900.45	24014382.2	2603.608571	6778777.59	12758846.2
	$\phi x = 138226$	$\phi Y = 76647.35$		$\phi x^2 = 72080048.27$		$\phi y^2 = 17155954.52$	$\phi xy = 33248044.71$

Here, N = 7

$$\bar{X} = Ex/N = 138226/7 = 19746.57$$

$$\bar{y} = Ey/N = 76647.35/7 = 10949.62$$

We have,

$$\phi x^2 = 72080048.27$$

$$\phi y^2 = 17155954.52$$

$$\phi xy = 33248044.71$$

Calculation of correlation coefficient (r) :

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = 33248044.71/35165352.69$$

$$\text{or } r = 0.945 \quad r^2 = 0.894$$

Calculation of Probable error,

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$\text{Or, P. Er.} = 0.0270 \quad 6 P. Er. = 0.162$$

Appendix A - 5
NABIL
Correlation between Total Deposits and Net Profit

F/Y	Total Deposits (X)	Net Profit (Y)	X=(x- \bar{x}) (x-14670)	x ²	y = (y- \bar{y}) (y-390.72)	Y ²	XY
00/01	15839	291.38	-759.40	576686.19	-174.7342857	30532.0706	132692.967
01/02	15506.4	271.64	-1091.97	1192395.36	-194.4742857	37820.2478	212359.808
02/03	13447.7	416.24	-3150.74	9927153.55	-49.87428571	2487.44438	157140.836
03/04	14119	455.32	-2479.37	6147268.51	-10.79428571	116.516604	26763.0128
04/05	14587	519	-2011.40	4045724.21	52.88571429	2796.89878	-106374.25
05/06	19347.39	635.26	2748.99	7556953.87	169.1457143	28610.2727	464980.119
06/07	23342.28	673.96	6743.88	45479936.7	207.8457143	43199.8409	1401686.85
	$\phi x =$ 116188.8	$\phi Y =$ 3262.8		$\phi x^2 =$ 74926118.4 2		$\phi y^2 =$ 145563.29 18	$\phi xy =$ 2289249.345

Here, N = 7

$$\bar{X} = \frac{\sum X}{N} = \frac{116188.8}{7} = 16598.40$$

$$\bar{y} = \frac{\sum Y}{N} = \frac{3262.8}{7} = 466.11$$

We have,

$$\phi xy = 2289249.345$$

$$\phi x^2 = 74926118.42$$

$$\phi y^2 = 145563.29$$

Calculation of correlation coefficient (r) :

$$r = \frac{\phi xy}{\sqrt{\phi x^2} \sqrt{\phi y^2}}$$

$$r = 2289249.35 / 3302497.91$$

$$\text{or } r = 0.693 \quad r^2 = 0.481$$

Calculation of Probable error,

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$\text{Or, } P. Er. = 0.132 \quad 6 P. Er. = 0.795$$

Appendix A - 6
SCBNL
Correlation between Total Deposits and Net Profit

F/Y	Total Deposits (X)	Net Profit (Y)	X=(x- \bar{x}) (x-18103.59)	x ²	y = (y- \bar{y}) (y-498.80)	Y ²	XY
00/01	15430.1	430.83	-4316.52	18632369.6	-118.37	14011.46	510946.81
01/02	15835.8	479.21	-3910.82	15294535.4	-69.99	4898.60	273718.49
02/03	18755.6	506.93	-990.94	981967.75	-42.27	1786.75	41887.15
03/04	21161.4	537.8	1414.87	2001849.03	-11.4	129.96	-16129.48
04/05	19335.1	539.2	-411.48	169318.142	-10	100	4114.83
05/06	23061.03	658.76	3314.46	10985626.2	109.56	12003.39	363131.93
06/07	24647.02	691.67	4900.45	24014382.2	142.47	20297.70	698166.70
	$\phi x =$ 138226	$\phi Y =$ 3844.4		$\phi x^2 =$ 72080048.27		$\phi y^2 =$ 53227.86	$\phi xy =$ 1875836.43

Here, N = 7

$$\bar{X} = Ex/N = 138226/7 = 19746.57$$

$$\bar{y} = Ey/N = 3844.4/7 = 549.2$$

We have,

$$\phi xy = 1875836.429$$

$$\phi x^2 = 72080048.27$$

$$\phi y^2 = 53227.86$$

Calculation of correlation coefficient (r) :

$$r = \frac{xy}{\sqrt{x^2} \sqrt{y^2}}$$

$$r = 1875836.43/1958741.186$$

$$\text{or } r = 0.958 \quad r^2 = 0.917$$

Calculation of Probable error,

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$\text{Or, } P. Er. = 0.021 \quad 6 P. Er. = 0.127$$

Appendix A - 7
NABIL
Correlation between Total Deposits and Interest Earned

F/Y	Total Deposits (X)	Interest Earned (Y)	X=(x- \bar{x}) (x-14699.82)	x ²	y = (y- \bar{y}) (y-1095.02)	Y ²	XY
00/01	15839	1266.7	-759.40	576686.19	70.58	4981.33474	-53597.2663
01/02	15506.4	1120.18	-1091.97	1192395.36	-75.94	5767.10057	82925.6533
02/03	13447.7	1017.87	-3150.74	9927153.55	-178.25	31773.5718	561623.651
03/04	14119	1001.62	-2479.37	6147268.51	-194.50	37830.8057	482240.729
04/05	14587	1068.74	-2011.40	4045724.21	-127.38	16226.0283	256214.823
05/06	19347.4	1309.99	2748.99	7556953.87	113.8685714	12966.0516	313023.727
06/07	23342.3	1587.75	6743.88	45479936.7	391.6285714	153372.938	2641096.65
	$\phi x =$ 116188.8	$\phi Y =$ 8372.85		$\phi x^2 =$ 74926118.42		$\phi y^2 =$ 262917.83	$\phi xy =$ 369478.49

Here, N = 7

$$\bar{X} = \frac{Ex}{N} = \frac{116188.8}{7} = 16598.40$$

$$\bar{y} = \frac{Ey}{N} = \frac{8372.85}{7} = 1196.12$$

We have,

$$\begin{aligned} \phi xy &= 4283527.97 \\ \phi x^2 &= 74926118.42 \\ \phi y^2 &= 262917.83 \end{aligned}$$

Calculation of correlation coefficient (r) :

$$r = \frac{\phi xy}{\sqrt{\phi x^2} \sqrt{\phi y^2}}$$

$$r = 4283527.97 / 4438402.02$$

or, $r = 0.965$ $r^2 = 0.93$

Calculation of Probable Error

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P. E.r. = 0.0175$$

$$6 P.E.r. = 0.105$$

Appendix A - 8
SCBNL
Correlation between Total Deposits and Interest Earned

F/Y	Total Deposits (X)	Interest Earned (Y)	X=(x- \bar{x}) (x- 18103.59)	x ²	y = (y- \bar{y}) (y- 1071.75)	Y ²	XY
00/01	15430.1	1242.92	-4316.52	18632369.6	105.727	11178.2287	-456373.629
01/02	15835.8	1013.64	-3910.82	15294535.4	-123.553	15265.3085	483193.338
02/03	18755.6	1001.36	-990.94	981967.746	-135.833	18450.5651	134602.6
03/04	21161.4	1042.18	1414.87	2001849.03	-95.013	9027.44302	-134430.57
04/05	19335.1	1058.67	-411.48	169318.142	-78.523	6165.83909	32310.8096
05/06	23061	1189.6	3314.46	10985626.2	52.407	2746.50862	173701.229
06/07	24647	1411.98	4900.45	24014382.2	274.787	75507.9739	1346579.87
	$\phi x =$ 138226	$\phi Y =$ 7960.35		$\phi x^2 =$ 72080048.27		$\phi y^2 =$ 138341.87	$\phi xy =$ 1579583.65

Here, N = 7

$$\bar{X} = \frac{Ex}{N} = \frac{90517.96}{7} = 12931.14$$

$$\bar{y} = \frac{Ey}{N} = \frac{5358.77}{7} = 765.54$$

We have,

$$\phi xy = 1579583.65$$

$$\phi x^2 = 72080048.27$$

$$\phi y^2 = 138341.87$$

Calculation of correlation coefficient (r) :

$$r = \frac{\phi xy}{\sqrt{\phi x^2} \sqrt{\phi y^2}}$$

$$r = \frac{1579583.65}{\sqrt{72080048.27} \sqrt{138341.87}}$$

$$\text{or, } r = 0.50$$

$$r^2 = 0.250$$

Calculation of P. Er.

$$\text{P. Er.} = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$\text{P. E.r.} = 0.191$$

$$6 \text{ P.E.r.} = 1.147$$

Appendix A - 9
NABIL
Correlation between Loan and advances and Interest Paid

F/Y	Outsides Assets (X)	Interest paid (Y)	X=(x- \bar{x}) (x-8747.12)	x ²	y = (y- \bar{y}) (y-376.94)	Y ²	XY
00/01	8324.44	578.36	-1990.41	3961731.97	178.701	31934.2006	-355689.11
01/02	7801.85	462.08	-2513.00	6315169	62.421	3896.43474	-156865.05
02/03	8113.68	317.35	-2201.17	4845149.37	-82.309	6774.70093	181175.158
03/04	8548.66	282.95	-1766.19	3119427.12	-116.709	13620.8906	206129.512
04/05	10947	244	632.15	399613.622	-155.659	24229.5909	-98399.5659
05/06	12922.5	357.16	2607.69	6800047.14	-42.499	1806.12857	-110823.1
06/07	15545.8	555.71	5230.93	27362628.7	156.051	24352.0484	816294.099
	$\phi x = 72203.95$	$\phi Y = 2797.61$		$\phi x^2 = 52803766.88$		$\phi y^2 = 106613.99$	$\phi xy = 481821.94$

Here, N = 7

$$\bar{X} = \sum X/N = 72203.95/7 = 10314.85$$

$$\bar{y} = \sum y/N = 2797.61/7 = 399.66$$

We have,

$$\phi xy = 481821.9431$$

$$\phi x^2 = 52803766.88$$

$$\phi y^2 = 106613.99$$

Calculation of correlation coefficient (r) :

$$r = \frac{\phi xy}{\sqrt{\phi x^2} \sqrt{\phi y^2}}$$

$$r = 481821.94/2372682.14$$

$$r = 0.203$$

$$r^2 = 0.0412$$

Calculation of Probable Error

$$P. Er. = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$P. Er. = 0.244$$

$$6 P. Er. = 1.47$$

Appendix A - 10
SCBNL

Correlation between Loan and advances and interest paid.

F/Y	Loan & Advance (X)	Interest Paid (Y)	X=(x- \bar{x}) (x-6498.48)	x ²	y = (y- \bar{y}) (y-312)	Y ²	XY
00/01	15430.1	1242.92	-4316.52	18632369.6	105.727	11178.2287	-456373.629
01/02	15835.8	1013.64	-3910.82	15294535.4	-123.553	15265.3085	483193.338
02/03	18755.6	1001.36	-990.94	981967.746	-135.833	18450.5651	134602.6
03/04	21161.4	1042.18	1414.87	2001849.03	-95.013	9027.44302	-134430.57
04/05	19335.1	1058.67	-411.48	169318.142	-78.523	6165.83909	32310.8096
05/06	23061	1189.6	3314.46	10985626.2	52.407	2746.50862	173701.229
06/07	24647	1411.98	4900.45	24014382.2	274.787	75507.9739	1346579.87
	$\phi x = 138226$	$\phi Y = 7960.35$		$\phi x^2 = 72080048.27$		$\phi y^2 = 138341.87$	$\phi xy = 1579583.65$

Here, N = 7

$$\bar{X} = \frac{\sum X}{N} = \frac{138226}{7} = 19746.57$$

$$\bar{y} = \frac{\sum Y}{N} = \frac{7960.35}{7} = 1137.19$$

We have,

$$\phi xy = 1579583.65$$

$$\phi x^2 = 72080048.27$$

$$\phi y^2 = 138341.87$$

Calculation of correlation coefficient (r) :

$$r = \frac{\phi xy}{\sqrt{\phi x^2} \sqrt{\phi y^2}}$$

$$r = 1579583.65 / 3157798.04$$

$$\text{Or, } r = 0.50 \quad r^2 = 0.25$$

Calculation of Probable Error

$$\text{P. Er.} = 0.6745 \frac{1 Z r^2}{\sqrt{N}}$$

$$\text{P. E.r.} = 0.191 \quad 6 \text{ P.E.r.} = 1.147$$

Appendix A - 11
NABIL
The Trend value of Total Deposits of NABIL

(Rs. in million)

F/Y	Total Deposits (y)	x=T- 2003/2004	x ²	xy	y = a + bx Trend Values
00/01	15839.00	-3	9	-47517	13241.495
01/02	15506.43	-2	4	-31012.86	14360.4629
02/03	13447.66	-1	1	-13447.66	15479.4307
03/04	14119.03	0	0	0	16598.3986
04/05	14587.00	1	1	14587	17717.3664
05/06	19347.39	2	4	38694.78	18836.3343
06/07	23342.28	3	9	70026.84	19955.3021
	$\phi y =$ 116188.79	$\phi x=0$	$\phi x^2=28$	$\phi xy=-31331.10$	

Here, N = 7

$$\text{or, } a = \phi y / N = 116188.79 / 7 \quad \text{or, } a = 16598.39$$

$$b = \phi xy / \phi x^2 = 31331.10 / 28 \quad \text{or, } b = 1118.97$$

Let the trend line be,

$$y = a + bx \dots\dots\dots (i)$$

The two normal equation are

$$\phi y = na + b \phi x \dots\dots\dots (ii)$$

$$\phi xy = a \phi x + b \phi x^2 \dots\dots\dots (iii)$$

$$\dots \text{From (ii) } a = \frac{\phi y}{N} \dots\dots\dots (iv)$$

$$\text{From (iii) } b = \frac{\phi xy}{\phi x^2} \dots\dots\dots (v)$$

... The straight line trend for total deposits is,

$$y = a + bx \mid 16598.39 + 1118.97x$$

$$\text{For year 2007/2008, } y = a + bx \mid 16598.39 + 1118.97 \mid 4$$

$$x = 4$$

y = Rs. 21,074.27 million

Other trend values have been calculated accordingly.

(Rs. in Million)

Year (t)	x = t – 2003/2004	y (Projected deposit) = a+bx
2007/2008	4	21,074.27
2008/2009	5	22,193.24
2009/2010	6	23,312.21
2010/2011	7	24,431.17
2011/2012	8	25,550.14

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SCBNL

The Trend value of Total Deposits of SCBNL

(Rs. in million)

F/Y	Total Deposits (y)	x=t-2003/2004	x ²	Xy	y = a + bx Trend Values
00/01	15430.05	-3	9	-46290.15	15173.62
01/02	15835.75	-2	4	-31671.5	16697.94
02/03	18755.63	-1	1	-18755.63	18222.25
03/04	21161.44	0	0	0	19746.57
04/05	19335.09	1	1	19335.09	21270.89
05/06	23061.03	2	4	46122.06	22795.21
06/07	24647.02	3	9	73941.06	24319.53
	$\phi y = 138226.01$	$\phi x=0$	$\phi x^2=10$	$\phi xy=42680.93$	

Here, N = 7

$$\text{or, } a = \frac{\sum y}{N} = \frac{138226.01}{7} \quad \text{or, } a = 19746.57$$

$$b = \frac{\sum xy}{\sum x^2} = \frac{42680.93}{28} \quad \text{or, } b = 1524.32$$

Let the trend line be,

$$y = a + bx \dots\dots\dots (i)$$

The two normal equation are

$$\sum y = na + b \sum x \dots\dots\dots (ii)$$

$$\sum xy = a \sum x + b \sum x^2 \dots\dots\dots (iii)$$

$$\dots \text{From (ii) } a = \frac{\sum y}{N} \dots\dots\dots (iv)$$

From (iii) $b = \frac{\sum xy}{\sum x^2}$ (v)

... The straight line trend for total deposits is,

$y = a + bx \mid 19746.57 + 1524.32X$

For year 2007/2008, $y = a + bx \mid 19746.57 + 1524.32X$
 $x = 4$

$y = \text{Rs. } 25,843.85 \text{ million}$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	$x = t - 2003/2004$	y (Projected deposit) = $a+bx$
2007/2008	4	25,843.85
2008/2009	5	27,368.17
2009/2010	6	28,892.49
2010/2011	7	30,416.81
2011/2012	8	31,941.12

Appendix A - 13

NABIL

The Trend value of Loan and Advances of NABIL

(Rs. in million)

F/Y	Loan and Advances (y)	$x=t-2003/2004$	x^2	xy	$y = a + bx$ Trend Values
00/01	8324.44	-3	9	-24973.32	6592.84
01/02	7801.85	-2	4	-15603.7	7833.51
02/03	8113.68	-1	1	-8113.68	9074.18
03/04	8548.66	0	0	0	10314.85
04/05	10947	1	1	10947	11555.52
05/06	12922.54	2	4	25845.08	12796.19
06/07	15545.78	3	9	46637.34	14036.86
	$\sum y = 72203.95$	$\sum x = 0$	$\sum x^2 = 28$	$\sum xy = 34738.72$	

or, $a = \sum y / N = 72203.95 / 7$ or, $a = 10314.85$

$b = \sum xy / \sum x^2 = 34738.72 / 28$ or, $b = 1240.67$

Let the trend line be,

$y = a + bx$ (i)

The two normal equation are

$$\sum y = na + b \sum x \dots\dots\dots (ii)$$

$$\sum xy = a \sum x + b \sum x^2 \dots\dots\dots (iii)$$

$$\dots \text{From (ii) } a = \frac{\sum y}{N} \dots\dots\dots (iv)$$

$$\text{From (iii) } b = \frac{\sum xy}{\sum x^2} \dots\dots\dots (v)$$

Here, N = 5

... The straight line trend for total deposits is,

$$y = a + bx \quad | \quad 10314.85 + 1240.67 \quad | \quad x$$

$$\text{For year 2007/2008, } y = a + bx \quad | \quad 10314.85 + 1240.67 \quad | \quad 4$$

$$x = 4$$

$$y = \text{Rs}15,277.52 \text{ million}$$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2003/2004	y (Projected deposit) = a+bx
2007/2008	4	15,277.52
2008/2009	5	16,518.19
2009/2010	6	17,758.86
2010/2011	7	18,999.53
2011/2012	8	20,240.20

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SCBNL
The Trend value of Loan and Advances of SCBNL

(Rs. in million)

F/Y	Loan and Advances (y)	x=t-2003/2004	x ²	xy	y = a + bx Trend Values
00/01	5681.35	-3	9	-17044.05	4915.45
01/02	5696.18	-2	4	-11392.36	5749.85
02/03	6000.16	-1	1	-6000.16	6584.24
03/04	6693.86	0	0	0	7418.64
04/05	8420.86	1	1	8420.86	8253.03
05/06	8935.42	2	4	17870.84	9087.43
06/07	10502.64	3	9	31507.92	9921.82
	$\phi y = 51930.47$	$\phi x = 0$	$\phi x^2 = 28$	$\phi xy = 23363.05$	

or, $a = E_y/N = 51930.47/7$ or, $a = 7418.64$

$b = E_{xy}/E_{x^2} = 23363.05/28$ or, $b = 834.395$

Let the trend line be,

$y = a + bx$ (i)

The two normal equation are

$\phi y = na + b \phi x$ (ii)

$\phi xy = a \phi x + b \phi x^2$ (iii)

... From (ii) $a = \frac{y}{N}$ (iv)

From (iii) $b = \frac{xy}{x^2}$ (v)

Here, $N = 5$

... The straight line trend for total deposits is,

$y = a + bx \mid 7418.64 + 834.395 \mid x$

For year 2007/2008, $y = a + bx \mid 7418.64 + 834.395 \mid 4$

$x = 4$

$y = \text{Rs } 10,756.22 \text{ million}$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	$x = t - 2003/2004$	y (Projected deposit) = $a+bx$
2007/2008	4	10,756.22
2008/2009	5	11,590.61
2009/2010	6	12,425.01
2010/2011	7	13,259.40
2011/2012	8	14,093.80

Appendix A - 15

NABIL

The Trend value of Investment of NABIL

(Rs. in million)

F/Y	Investment (y)	$x=t-2003/2004$	x^2	xy	$y = a + bx$ Trend Values
00/01	7704.31	-3	9	-23112.93	6960.60
01/02	8199.51	-2	4	-16399.02	6886.21
02/03	6031.18	-1	1	-6031.18	6811.82
03/04	5835.95	0	0	0	6737.43
04/05	4267.23	1	1	4267.23	6663.042
05/06	6178.53	2	4	12357.06	6588.65
06/07	8945.31	3	9	26835.93	6514.26
	$\phi y = 47162.02$	$\phi x=0$	$\phi x^2=28$	$\phi xy=-2082.91$	

$$\text{or, } a = E_y/N = 47162.02/7 \quad \text{or, } a = 6737.43$$

$$b = E_{xy}/E_{x^2} = -2082.91/28 \quad \text{or, } b = -74.39$$

Let the trend line be,

$$y = a + bx \dots\dots\dots (i)$$

The two normal equation are

$$\phi y = na + b \phi x \dots\dots\dots (ii)$$

$$\phi xy = a \phi x + b \phi x^2 \dots\dots\dots (iii)$$

... From (ii) $a = \frac{y}{N}$ (iv)

From (iii) $b = \frac{xy}{x^2}$ (v)

Here, $N = 5$

... The straight line trend for total deposits is,

$$y = a + bx \quad | \quad 6737.43 + (-)74.39 x$$

For year 2007/2008, $y = a + bx \quad | \quad 6737.43 (-)74.39 \quad | \quad 4$

$$x = 4 \qquad \qquad \qquad y = \text{Rs. } 6,439.87 \text{ million}$$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	$x = t - 2003/2004$	Y (Projected deposit) = $a+bx$
2007/2008	4	6,439.87
2008/2009	5	6,365.48
2009/2010	6	6,291.09
2010/2011	7	6,216.70
2011/2012	8	6,142.31

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SCBNL

The Trend value of Investment of SCBNL

(Rs. in million)

F/Y	Investment (y)	$x=t-2003/2004$	x^2	xy	$y = a + bx$ Trend Values
00/01	9559.18	-3	9	-28677.54	8972.59
01/02	9275.88	-2	4	-18551.76	9631.599
02/03	10357.68	-1	1	-10357.68	10290.61
03/04	11360.33	0	0	0	10949.62
04/05	9702.5	1	1	9702.5	11608.63
05/06	12838.55	2	4	25677.1	12267.64
06/07	13553.23	3	9	40659.69	12926.65
	$\phi y = 76647.35$	$\phi x = 0$	$\phi x^2 = 10$	$\phi xy = 18452.31$	

or, $a = E_y/N = 76647.35/7$ or, $a = 10949.62$

$b = E_{xy}/E_{x^2} = 18452.31/28$ or, $b = 659.011$

Let the trend line be,

$$y = a + bx \dots\dots\dots (i)$$

The two normal equation are

$$\phi y = na + b \phi x \dots\dots\dots (ii)$$

$$\phi xy = a \phi x + b \phi x^2 \dots\dots\dots (iii)$$

$$\dots \text{From (ii) } a = \frac{\phi y}{N} \dots\dots\dots (iv)$$

$$\text{From (iii) } b = \frac{\phi xy}{\phi x^2} \dots\dots\dots (v)$$

Here, $N = 5$

... The straight-line trend for total deposits is,

$$y = a + bx \mid 10949.62 + 659.01Xx$$

$$\text{For year 2007/2008, } y = a + bx \mid 10949.62 + 659.01 \mid 4$$

$$x = 4 \qquad y = \text{Rs.13,585.67 million}$$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	$x = t - 2003/2004$	y (Projected deposit) = $a+bx$
2007/2008	4	13,585.67
2008/2009	5	14,244.68
2009/2010	6	14,903.69
2010/2011	7	15,562.70
2011/2012	8	16,221.71

Appendix A - 17
NABIL
The Trend value of Net Profit of NABIL

(Rs. in million)

F/Y	Net profit (y)	x=t-2003/2004	x ²	xy	y = a + bx Trend Values
00/01	291.38	-3	9	-874.14	254.21
01/02	271.64	-2	4	-543.28	324.84
02/03	416.24	-1	1	-416.24	395.48
03/04	455.32	0	0	0	466.11
04/05	519	1	1	519	536.75
	635.26	2	4	1270.52	607.38
	673.96	3	9	2021.88	678.015
	∑y = 3262.8	∑x = 0	∑x ² = 28	∑xy = 1977.74	

or, $a = \frac{\sum y}{N} = \frac{3262.8}{7}$ or, $a = 466.11$

$b = \frac{\sum xy}{\sum x^2} = \frac{1977.74}{28}$ or, $b = 70.63$

Let the trend line be,

$y = a + bx$ (i)

The two normal equation are

$\sum y = na + b \sum x$ (ii)

$\sum xy = a \sum x + b \sum x^2$ (iii)

... From (ii) $a = \frac{\sum y}{N}$ (iv)

From (iii) $b = \frac{\sum xy}{\sum x^2}$ (v)

Here, $N = 7$

... The straight line trend for total deposits is,

$y = a + bx \quad | \quad 466.11 + 70.63X$

For year 2007/2008, $y = a + bx \quad | \quad 466.11 + 70.63 \quad | \quad 4$

$x = 4$

$y = \text{Rs.}748.65 \text{ million}$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2003/2004	y (Projected deposit) = a+bx
2007/2008	4	748.65
2008/2009	5	819.28
2009/2010	6	889.92
2010/2011	7	960.55
2011/2012	8	1,031.18

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SCBNL

The Trend value of Net Profit of SCBNL

(Rs. in million)

F/Y	Net profit (y)	x=t-2003/2004	x ²	xy	y = a + bx Trend Values
00/01	430.83	-3	9	-1292.49	423.43
01/02	479.21	-2	4	-958.42	465.351
02/03	506.93	-1	1	-506.93	507.28
03/04	537.8	0	0	0	549.2
04/05	539.2	1	1	539.2	591.125
05/06	658.76	2	4	1317.52	633.049
06/07	691.67	3	9	2075.01	674.97
	$\phi y = 3844.4$	$\phi x = 0$	$\phi x^2 = 28$	$\phi xy = 1173.89$	

$$\text{or, } a = E_y/N = 3844.4/7 \quad \text{or, } a = 549.2$$

$$b = E_{xy}/E_{x^2} = 1173.89/28 \quad \text{or, } b = 41.92$$

Let the trend line be,

$$y = a + bx \dots\dots\dots (i)$$

The two normal equation are

$$\phi y = na + b \phi x \dots\dots\dots (ii)$$

$$\phi xy = a \phi x + b \phi x^2 \dots\dots\dots (iii)$$

... From (ii) $a = \frac{y}{N}$ (iv)

From (iii) $b = \frac{xy}{x^2}$ (v)

Here, $N = 5$

... The straight line trend for total deposits is,

$$y = a + bx \quad | \quad 549.2 + 41.92X$$

For year 2007/2008, $y = a + bx \quad | \quad 549.2 + 41.92 \quad | \quad 3$

$$x = 4 \qquad \qquad \qquad y = \text{Rs } 716.90 \text{ million}$$

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2003/2004	y (Projected deposit) = a+bx
2007/2008	4	716.90
2008/2009	5	758.82
2009/2010	6	800.75
2010/2011	7	842.67
2011/2012	8	884.60