INVESTMENT PATTERN OF JOINT VENTURE BANKS IN NEPAL

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

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A THESIS SUBMITTED TO:

Office of the Dean
Faculty of Management
TRIBHUVAN UNIVERSITY

In partial fulfillment of the requirement for the degree of

Master of Business Studies (M.B.S)

Kathmandu, Nepal

April, 2012

RECOMMENDATION

This is to certify that the thesis

Submitted by:

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Entitled:

INVESTMENT PATTERN OF JOINT VENTURE BANKS IN NEPAL

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

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment for the

Degree of Master of Business Studies (M.B.S.)

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DECLARATION

I hereby declare that the work reported in the thesis entitled "Investment Polices Of Joint Venture Banks In Nepal (A case study of Nabil Bank Limited and Standard Chartered Bank Nepal Limited)" submitted to Shankar Dev Campus, Faculty of Management, Tribhuvan University is my orginal work done in form of partial fulfillment of the requirement for the Master's Degree in Business Studies (M.B.S) under the supervision of Mr. Prakash Singh Pradhan, teachers of Shanker Dev Campus.

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Date: April, 2012

ACKNOWLEDGEMENTS

As the partial fulfillment of the Masters of Business Studies (MBS) degree, I have prepared this report. During the course, I worked with sincerity, honesty and diligently, as far as possible. But beside my continual efforts, I also got unforgettable support from different people and parties. I am extremely grateful and overwhelmed by their support while completing my work.

I would like to express cordial gratitude to my thesis supervisors Mr. Prakash Singh Pradhan. Despite his busy schedule, he has made significant contribution for preparing this thesis.

I would like to express thanks to all the library and administrative staffs of Shanker Dev Campus for the necessary help in the preparation of this thesis. I must not forget to thank my friends and colleagues for the regular inspiration and support. Many many thanks to my friends.

I would like to extend my heart-felt gratitude to my family members. They always inspired me to complete my higher study and provided all the necessary logistic supports.

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B.S.:	Bikram Sambat
BOKL:	Bank of Kathmandu
C.V:	Coefficient of Variation
EBL:	Everest Bank Limited
EPS:	Earning Per Share
F/Y:	Fiscal Year
HBL:	Himalayan Bank Ltd.
JVB:	Joint Venture Bank
NABIL:	Nabil Bank Ltd.
NBBL:	Nepal Bangladesh Bank Ltd.
NBL:	Nepal Bank Limited
NIBL:	Nepal Investment Bank Ltd.
NIDC:	Nepal Industrial Development Corporation
NRB:	Nepal Rastra Bank
NSBL:	Nepal SBI Bank Ltd.
PE.:	Probable Error
r:	Coefficient of Correlation
RBB:	Rastriya Banijya Bank
Rs.:	Rupees
S.D:	Standard Deviation
SCBNL:	Standard Chartered Bank Nepal Ltd.
OBS	Off balance sheet

INVESTMENT PATTERN OF JOINT VENTURE BANKS IN NEPAL

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CHAPTER –I
INTRODUCTION

1. Introduction

1.1 Background of the study

Investment in financial sense is placing of money in the other for their use expecting a return or the participation in expected profits. But for manufacturing and trading firms the terms investment will be long term expenditures that aim at increasing return of efficiency or at building up goodwill thereby producing and increasing return over as period. Investment also seek to manage their wealth effectively obtaining the most from it, while protecting it from inflation, taxes and other risks.

Investment by individuals, business and government involves a present sacrifice of income to get on expected on future benefit as a result investment raises an economy of nations.

Investment usually involves putting money into a bet, which is not necessarily marketable in order to enjoy a series of return the investment is expected to yield. On the other hand speculation is usually a shorter run phenomenon. Speculators tend to buy assets with the expecting of a profit than can be earned from subsequent price charge and sale. Investments are usually made expecting a certain stream of income, which has existed, will not change in the future.

According William F. Shape. Gordon J. Alexander and Jeffery V. Baily "Investment in its broadest sense means the sacrifice of current dollars for future dollars. Two different attributes are generally involved time and risk. The sacrifice takes place in the present and its magnitude generally is certain" (Shape Alexander and Baily, 1998: 1)

In the study of the financial institutions the investment and investment problems will revolve around the concept of managing the surplus financial assets in such a way, which will lead to the wealth maximization and providing a significant further source of income. Thus the investment is the management of the surplus resources in such a way as to make it work for providing benefits to the supplier of the funds by letting it to third party. However, the investment needs to be a procedural task. It must follow a definite investment process, which definitely being the formulation of proper investment policy.

"Investment in its broadest sense means sacrifice of current rupees for future rupees" it is defined by William J Sharpe and Alexander j Gordon for the term 'Investment'. Therefore, every investment entails some degree of risk.

Investment Policy

Investment policy is the proper management of any fund or wealth to maximize value or to obtain this high or favorable return with law risk considering the protection of Invest forms the inflation 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 PATTERN 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.

1.1.1. 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.

1.1.2. 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.

1.1.3. Investment Pattern of Nepalese Commercial Banks

In Nepal development of banking is relatively recent. The record of banking system in Nepal gives detail account of mixture of slow and steady evolution in the financial and global economy of Nepalese life. In involvement of landlord, rich merchants shopkeepers and other individual money holder has acted as fence to institutional credit in presence of unorganized money market. In Nepalese chronicle it was recorded that the new era known as Nepal sambat was introduced by shankhadhar, a sudra merchant of Kantipur in 879 or 880 A.D after having paid all the outstanding debts in the country. This shows the basic of money lending practice in ancient Nepal. Towards the end of 8^{th} century, Gunkamdev had borrowed money to rebuild the Kathmandu valley. Mall regime was an evidence of banking activities. It is beloved that financing for foreign trade with Tibet became quite popular during the regime of malla. However the absence of regulatory measures money lenders were known to have charged High rate of interest and extra on loans.

The establishment of “Tejarath Adda” during the year 1877 A.D. was the first step in institutional development of banking sector in Nepal. Tejarath Adda did not collect deposit from public but granted loans to public against the collateral of bullions. Consequently the major parts of the country remain untouched from these limited-banking activities. The development of trade with India and other countries increase the necessity of the institutional banker, which can act more widely to enhance the trade and commerce and to touch the remote non-banking sector in the economy. Considering this situation, the “Udyog Parishad” was constituted in 1936 A.D. One year after its establishment, it formulated the “Company Act” and “Nepal Bank Act” in 1937 A.D. Nepal Bank limited was established under Nepal Bank Act in 1937 A.D. as a first commercial bank of Nepal with authorized capital of Rs. 10 million.

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

come into existence to cater the financial needs of the country thereby assisting financial development of the country.

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

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

There were only two banks prior to 1980's they are NBL and RBB. All the three Commercial Banks(Grindlays Bank, Nepal Arab Bank and Indosuez Bank Limited) of 1980's were established as joint venture banks. 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 and Nepal Indosueze Bank Ltd are now known as Standard Chartered Bank Nepal Ltd, Nepal Investment Bank Ltd, respectively.

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

	Names	Operation Date (A.D.)	Head Office	Paid up Capita *l(Rs. '00 Thosands)*
1	Nepal Bank Ltd.	1937/11/15	Kathmandu	3804
2	Rastriya Banijya Bank Ltd.	1966/01/23	Kathmandu	3853
3	Agriculture Development Bank Ltd.	1968/01/02	Kathmandu	94375
4	Nabil Bank Ltd.	1984/07/16	Kathmandu	20298
5	Nepal Investment Bank Ltd.	1986/02/27	Kathmandu	24091
6	Standard Chartered Bank Nepal Ltd..	1987/01/30	Kathmandu	16102
7	Himalayan Bank Ltd.	1993/01/18	Kathmandu	20000
8	Nepal SBI Bank Ltd.	1993/07/07	Kathmandu	18693
9	Nepal Bangladesh Bank Ltd.	1994/06/05	Kathmandu	20103
10	Everest Bank Ltd.	1994/10/18	Kathmandu	11196
11	Bank of Kathmandu Ltd.	1995/03/12	Kathmandu	13595
12	Nepal Credit and Commerce Bank Ltd.	1996/10/14	Siddharthanagar, Rupandehi	13997
13	Lumbini Bank Ltd.	1998/07/17	Narayangadh,Chitawan	13000
14	Nepal Industrial & Commercial Bank Ltd.	1998/07/21	Biaratnagar,Morang	13116
15	Machhapuchhre Bank Ltd.	2000/10/03	Pokhara, Kaski	16272
16	Kumari Bank Ltd.	2001/04/03	Kathmandu	14850
17	Laxmi Bank Ltd.	2002/04/03	Birgunj, Parsa	16140
18	Siddhartha Bank Ltd.	2002/12/24	Kathmandu	15610
19	Global Bank Ltd.	2007/01/02	Birgunj, Parsa	15000
20	Citizens Bank International Ltd.	2007/06/21	Kathmandu	19223
21	Prime Commercial Bank Ltd	2007/09/24	Kathmandu	22457
22	Sunrise Bank Ltd.	2007/10/12	Kathmandu	18554
23	Bank of Asia Nepal Ltd.	2007/10/12	Kathmandu	15175
24	DCBL Bank Ltd.	2008/05/25	Kamaladi, Kathmandu	19209
25	NMB Bank Ltd.	2008/06/05	Babarmahal, Kathmandu	16517
26	Kist Bank Ltd.	2009/05/07	Anamnagar, Kathmandu	20000
27	Janata Bank Nepal Ltd.	2010/04/05	New Baneshwor, Kathmandu	14000
28	Mega Bank Nepal Ltd.	2010/07/23	Kantipath, Kathmandu	16310
29	Commerz & Trust Bank Nepal Ltd.	2010/09/20	Kamaladi, Kathmandu	14000
30	Civil Bank Litd.	2010/11/26	Kamaladi, Kathmandu	12000
31	Century Commercial Bank Ltd.	2011/03/10	Putalisadak , Kathmandu	10800
32	Sanima Bank	2004/11/26	Kamalpokhari, Kathmandu	20160

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. 4. Profiles of the Banks under Study

Nabil Bank Limited

Nabil Bank limited is the first joint venture bank of Nepal. 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. It started operations in July 1984, with the objective of extending international standard modern banking services to various sector of the society.

The bank is managed by a team of qualified and highly experienced professionals. 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 bank provides a complete range of personal, commercial and corporate banking and related financial services through its 50 branches and 2 airport counters. 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.

Share capital of Nabil Bank ltd (as at July 2010)

Table 1

Share Capital	**Amount (NRs)**
Authorized Capital 16,000,000@100	**1,600,000,000**
Issued Capital 14,491,240@100	**1,449,124,000**
Paid up Capital 14,491,240@100	**1,449,124,000**

Standard Chartered Bank Nepal Ltd.

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal.

Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 75,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market.

With 19 points of representation, 23 ATMs across the country and with more than 425 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal.

Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer banking, Wholesale and SME Banking catering to a wide range of customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines, hotels as well as the DO segment comprising of embassies, aid agencies, NGOs and INGOs.

The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

Corporate Social Responsibility is an integral part of Standard Chartered's ambition to become the world's best international bank and is the mainstay of the Bank's values. The

Bank believes in delivering shareholder value in a socially, ethically an environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children, particularly in the areas of health and education. Environmental projects are also occasionally considered. It supports non-governmental organisations involving charitable community activities The Group launched two major initiatives in 2003 under its 'Believing in Life' campaign- 'Living with HIV/AIDS' and 'Seeing is Believing'.

Share capital of Standard Chartered Bank ltd (as at July 2010)

Table-2

Share Capital	**Amount (NRs)**
Authorized Capital 20,000,000@100	2,000,000,000
Issued Capital 13,984,836@100	1,398,483,600
Paid up Capital 13,984,836@100	1,398,483,600

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

The main objective of the study is to assess the investment policy and strategy followed by the bank with reference to Nabil Bank ltd and SCBNL. The main objectives of this study mentioned below:

a. To analyze the deposit utilization of NABIL & SCBNL.
b. To find out relationship between total investment, deposit, loan & advance and net profit.
c. To evaluate the liquidity, efficiency, risk position and profitability of the selected banks.
d. To analyze the financial position of NABIL and SCBNL in terms of deposit collection and investment procedure.
e. To suggest and recommend on the investment policy of sample banks.

1.3 Focus and 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 Limitation 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.

1) This study is mainly concerned to only two banks i.e. Nabil Bank ltd and SCBNL.
2) The whole study is based on secondary data from the respective banks and websites on net, article, newspapers.
3) The study period will be covered by only seven fiscal year i.e. from 2003/2004 to 2009/2010.
4) Lack of sufficient time and resources.
5) In this study only selected tools and technique are used.
6) This study is conducted only for suggestion not for directing.

1.5 Organization of the study

The study will be organized into five chapters:

Chapter 1

Introduction

This chapter deals with the subjects matters of the study consisting background of the study, statement of the problem, objective of the study, significance of the study and limitation of the study.

Chapter 2

Review of literature

This chapter deals with review of the different literature of the study field. Therefore, it includes conceptual framework along with the review of major books, journal, research work and thesis etc.

Chapter 3

Research methodology

This chapter deals with research methodology and it includes research design, population and sample, source and technique of data collection, data analysis tools and limitation of the methodology

Chapter 4

Data presentation and analysis

This chapter deals with analysis and interpretation of the data using financial and statistical tools describe in chapter three. 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. Similarly this chapter also includes the major findings of the study.

Chapter 5

Summary, Findings, Conclusion and Recommendations

This chapter deals with summary of the study held, the conclusion made ultimately and the possible suggestion 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 Joehank(Gitman and Joehank, 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

The commercial banks are inspired with the goal of earning profit. There are many reasons after the goals of gaining profit. In order to reach their desired goals, they must

invest the resources. It is not better to keep the available resources idle. The bank should be able to clear the policy of its investment by making a deep study on the subjects that which sector would be the trust worthier & dependable to invest the funds collected in the bank, they should have the ability to use the policy of banking investment in its goal. The income and profit of the bank depends upon its investment policy & term Landry procedure of its funds in different securities. The greater the credit created by the bank the Higher will be the profitability. A sound bending & investment policy is not only prerequisite for the bank's profitability but also crucially significant for the promotion of commercial saving of a backward country like Nepal. Therefore, the following principles or features of investment policy must be abided by the commercial banks in order to achieve the goals.

A. Safety and Security

Commercial banks must pay a special attention to the principle safety and security. There will be a loss whether it is small or big, if the bank has not invested in secure and safe sectors; Investment in unsafe and insecure sectors with the hope of getting more return is to accept the security of law quality. The condition of unsafe arise when a bank invest in large loan against less securities by receiving commission, invests in new places without careful observation, landing to long-term borrowers etc. All these unsafe conditions should be avoided as much as possible. A bank should be very much conscious in investing procedures and profitable sectors. It should never invest its fund on those securities, which are subjected to too much for volatility (Depreciation are fluctuation) because a little alternation may cause a great loss. It must not invest its fund into speculative businessman, who may be bankrupt at once and who may earn millions in minute also. Only Commercial durable, marketable and high market valued securities should be accepted. For this purpose "MAST" should be followed, where MAST stands for:

M - Marketable

A - Ascertainable

S - Stability

T - Transferability

B. Profitability

The profit of commercial bank mainly depends on the interest rate, volume of loan and its time period and nature of investment in different securities. It is a fact that a commercial bank can maximize its volume of wealth through maximization of return on their investment and lending so, they must invest their funds where they gain maximum profit. Ambition of profit to commercial bank seem reasonable as the bank has to cover all the expenses and make payment in the forms dividend to the shareholder who contribute to build up to bank's capital and interest to the depositors. For this the bank calculates the cost of fund and likely return, if the spread is enough irrespective of risk involved and absorbs its liquidity. Obligation, it will go ahead for investment good bank is one who invests more of its fund in different earning assets standing. Safety from the problem of liquidity, i.e. keeping cash resurvey to meet day to day requirements of the depositors.

C. Suitability

This is very important question for any banker is that, why a customer is in need for loan. If borrower misuses the loan granted by the bank, he can never repay the loan and bank will possess heavy bad debts. Therefore, in order to avoid this situation each and every bank should demand all the essential detailed information about the scheme of the project or activities would be examined before lending.

D. Liquidity

It is the position of the firm to meet current or short-term obligations. General public or customers deposit their saving at the banks in different accounts having full confidence of repayment by the banks whenever they require. To show a good current position and maintain the confidence of the customers, every firm must keep proper cash balance with then while investing in difference securities and granting loan from excess fund.

E. Diversification

"A bank should not lay all its eggs on the same baskets." This saying is very important to the bank and it should be always careful not to grant loan in only one sector. To minimize risk, a bank must diversify its investment on different sectors. Diversification of loan helps to sustain loss according to the low of average; if a security of a company is divided of there may be an 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

Financial institution collect deposits from the customers in various accounts, like: current account, saving account and fixed account. Therefore, the sums of money collected by the financial institutions from the depositors in various accounts are called deposits. Deposit is the main source of fund of the financial institutions

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 interbank 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..

Sharma, M.P. & Bhatt, M.P. (2002), in their article "Priority receiver sector" has present "The commercial banks should take care of board national interest & they showed not confine their lending activities only to commercial area providing quick interest if some proportion could be directed to the area conclusive to build economic infrastructures of the country it would create atmosphere conductive to their investment in future. In our society where ignorance & literacy is in wild scale, it is necessary that the banks search entrepreneurs instead of entrepreneurs searching book. So, they have

opinioned that the priority sector program is a timely & opportunities there by increasing production & the general living standard or rural poor. But the success of the largely depends upon the interpreted operation with other program design for rural development. Further they agree that various programmers: Rural development land reform, back to the village national, champion audit literacy etc. couldn't materials their objectives despite their some theoretically philosophy & food objectives

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. 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.

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.

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.

Shrestha (2004) conducted a study on "Nepal Rastra Bank Guidelines on Investment policy of commercial banks in Nepal (A case study of Nepal Investment Bank)". The main findings of the study are:

- Bank is in good position to meet the daily cash requirement as bank has maintained the average cash & bank balance in respect to total deposit.
- The performance of NIBL regarding deposit collection granting loan & advance & investment is quite satisfactory but doesn't seem to follow definite policy.
- NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital.
- Interest earned to total operating income of NIBL is High. However bank failed to maintain net profit on the study.
- From the analysis of coefficient of correlation. There is positive & significant relation between total deposit & loan and advances and current assets and current liabilities and loan and advances but there is negative and no significant relationship between outside assets & her profit.

Joshi (2005) conducted a study on "Investment policy of commercial banks in Nepal: A comparative study of Everest Bank Limited, Nabil Bank Limited & Bank of Kathmandu" has presented research finding of the study are:

- The liquidity position of the EBL is comparatively better than NABIL & BOK. EBL has the Highest cash & bank balance to total deposit, cash & bank balance to current assets ratio. Nabil has lowest liquidity position than that of other two banks. EBL has good deposit collection & has made enough investment on government securities but it is maintained moderate investment policy on loan & advances.

- From the analysis of assets management ratio or activity ratio, it can be concluded that EBL is comparatively average or in between successful in compared to Nabil & BOK. The total investment of EBL is in between in compared to other two banks.
- In analysis of profitability, total interest earned to total outside assets of EBL is lowest at all. But overall analysis of profitability ratios. EBL is average profitability ratios. EBL is average profitable in comparison to other compared banks i.e. Nabil & BOK. From the view point of risk ratio, EBL has Higher capital risk but average of credit risk ratio in compared to Nabil & BOK.

Shrestha, Prabindra (2009) in his thesis, "Investment Policy of Commercial Banks, with reference to Nabil Bank Ltd and Nepal Investment Bank Ltd" has is found that both selected banks have strong financial performance but comparatively Nabil Bank is in better position. Despite of social contribution Nabil Bank has higher profit earnings. It is concluded that Nabil Bank has adopted better investment policy than that of NIBL.

In conclusion, it can be said that central banks are required to direct the commercial banks. C.B. should move as per the direction given by the central bank. Banks should have optimum policy to collect the deposit in various accounts. Deposit is the major organ of commercial bank to live in the industry. Higher the deposit Higher will be the chance of mobilization of working fund and profit thereto. Banks should not invest their' fund haphazardly. It should be careful while advancing loan because loan is the blood of the C.B. for survival. If C.B. does not apply sound investment policy it will be in great trouble in future to collect it in time, hence the possibility of bankruptcy thereto. Banks should invest their fund in various portfolios after the deep study of the project to be safe from being bankruptcy. If banks concentrate the investment in few organizations there is a high chance of default risk. Diversification is needed to all the business houses but it has seen immense importance to C.B. Hence, the C.B. should implement the investment policy considering the directives issued by NRB. CBs should not cross the boundary level set by central bank to make investment policy. In overall, it can be concluded that the role of NRB in investment policy of commercial bank has both positive and negative impacts.

2..1.3 Research Gap

The purpose of the research work is quite different from the studies made by the above persons (related to commercial bank). This study focuses in effectiveness in investment. Policy analysis of Nabil Bank & Standard Chartered Bank Ltd. banking comprehensive manner considering the major items. Different financial & statistical tools have been used in this study. Among them, ratio analysis, regression analysis are the strong financial tools. This study is a little bit different than previous studies. It may be one of them research study of investment policy in few research work with reference to NABIL & SCBNL. This study tires to indicate the effectiveness of investment policy of concerned banks.

2.1.4 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 by 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

Having stated about introduction & reviewing of literature in chapter I & II, now the task has come to make decisive choice of research methods to support the in realistic term with sound empirical analysis. The study with try to come at conclusion regarding with what position NABIL & SCBNL has got in the Commercial banking sectors in Nepal. Then these chapters will deals the research methodology used in the study for analysis of the two sampled Commercial Bank.

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain objectives in view. (C.R. Kothari, 1989) in other words, research methodology describes the method & process applied in the entire aspect of the study. It is a way to solve the research problem systematically & scientifically. A fact research methodology is much vague than research methods i.e. research method is just a part of research methodology. It considers the logic behind the use of the methods in the context of research study & explains why a particular method or techniques is used. Thus research methodology is concerned not only about the different types of methods used but also about various other facts like what data have been collected, what are the purpose & problem of research etc. so, to up the research methodology that has been adopted for the study is mentioned in This chapter, which deals with the research design, sources of data, data collection, population & sample, processing & tabulating procedures.

3.2 Research Design

Research design means an overall framework for the activities to be taken during the course of a research study. It enables the way of research providing the tools & techniques for the data collection & analysis & sampling plan to be followed. Generally research design describes the general plan for collecting analyzing & evaluating data after identifying. It is an integrated system that guides the researcher in formulating, implementing & controlling the study conceived so as to obtain answers to research

questions & to control variance. Both analytical & descriptive methods have been used to attain the overall objectives. Firstly, it specifies the sources & type of information relevant to research question, secondly it specifies; the data. Thus, a research design specifies various methods & procedures for acquiring the information including from which sources & by what procedure it is obtained.

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 32 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 proposes 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,

$$\textit{Cash \& Bank Balance to Total Deposit Ratio} \quad \text{X} \frac{\textit{Cash \& Bank Balance}}{\textit{Total Deposit}}$$

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,

$$\textit{Cash \& Bank Balance to Current Assets Ratio} \quad X\frac{\textit{Cash \& Bank Balance}}{\textit{Current Assets}}$$

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,

$$\textit{Loan and Advance to Total Deposits Ratio} \quad X\frac{\textit{Loan and Advance}}{\textit{Total Deposits}}$$

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,

$$\textit{Total Investment to Total Deposit Ratio} \quad X\frac{\textit{Total Investment}}{\textit{Total Deposits}}$$

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,

$$\textit{Investment in Government Securities} \quad X \quad \frac{\textit{Investment in Govt. Securities}}{\textit{Total Working Fund}}$$

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 is shares & debenture of other companies by total working fund. Mathematically,

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

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,

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

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,

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

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,

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

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,

$$Liquidity\ Risk\ Ratio \quad X \quad \frac{Total\ Cash\ \&\ Bank\ Balance}{Total\ Deposits}$$

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 in 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,

$$Credit\ Risk\ Ratio \quad X \quad \frac{Total\ Loan\ and\ Advances}{Total\ Assets}$$

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 tend 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.

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

Here, ϕx = Sum of observation in series x

ϕ y = Sum of observation in series y

ϕ x^2 = Sum of squared observation in series x

ϕ y^2 = Sum of squared observation in series y

ϕ xy = 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 2004/2005 to F/Y 2009/2010 are analyzed. It also aids in making forecasting for the next five years up to 2014/2015. 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,

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

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

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

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.

4.2 Liquidity ratio

Liquidity ratio measures the ability of banks to meet the investment purposes. A commercial bank must maintain its satisfactory liquidity positron to meet the credit need of the customer also. Banks have to maintain enough liquidity because they have to meet the demand of deposits, withdrawals, pay maturity etc. 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,

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

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
2003/2004	6.87	9.56
2004/2005	3.83	5.75
2005/2006	2.87	4.46
2006/2007	5.93	8.08
2007/2008	7.33	5.65
2008/2009	8.89	6.45
2009/2010	2.55	3.77
Mean	5.5	6.2
S.D.	2.25	1.86
C.V.	41.08	29.84

Source: ***Appendix –4***

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
2003/2004	5.80	8.51
2004/2005	3.29	5.03
2005/2006	2.53	4.27
2006/2007	5.13	7.38
2007/2008	6.41	5.06
2008/2009	7.69	5.72
2009/2010	3.31	3.31
Mean	4.7	5.6
S.D.	1.91	1.66
C.V.	40.42	29.58

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 7.69% in F/Y 2008/09, and a low ratio of 2.31% in 2009/10. Similarly, SCBNL has had a high of 7.38% in F/Y 2006/07 anticipating higher cash requirement depositors in this F/Y. It has a low ratio of 3.31% in F/Y 2009/2010. The average mean ratio of SCBNL is slightly higher than NABIL. The C.V. of NABIL is greater than that of SCBNL i.e., 40.42%>29.58%.

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,

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

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
2003/2004	60.55	31.63
2004/2005	75.05	43.55
2005/2006	66.79	38.75
2006/2007	66.60	42.61
2007/2008	66.94	46.12
2008/2009	73.87	38.13
2009/2010	69.52	45.35
Mean	68.5	40.9
S.D.	4.55	4.71
C.V.	6.65	11.52

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 60.55% in F/Y 2003/04. Accordingly, SCBNL had a high of 46.12% in F/Y 2007/08 and a low of 31.63% in F/Y 2003/04. The mean ratio of NABIL is above 1.67 times that of SCBNL i.e. 68.5%>40.9%. NABIL seems stronger in terms of mobilization of its total deposits as loan and advances when compared to SCBNL. In terms of C.V., SCBNL C.V is higher than of NABIL.

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,

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

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
2003/2004	31.63	53.68
2004/2005	43.55	50.18
2005/2006	38.75	55.67
2006/2007	42.61	54.99
2007/2008	46.12	46.74
2008/2009	38.13	56.41
2009/2010	45.35	56.41
Mean	40.9	53.4
S.D.	4.71	3.39
C.V.	11.52	6.35

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 46.12% in F/Y 2007/08 and a low ratio of 31.63% in F/Y 2003/2004. SCBNL, on the other hand had a high ratio of 56.41% in F/Y 2009/2010 and a low ratio of 46.74% in F/Y2007/08 respectively. SCBNL has a high mean ratio than NABIL i.e., 53.4%>40.9%.

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

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

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

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
2003/2004	21.47	33.22
2004/2005	13.75	32.49
2005/2006	10.14	33.51
2006/2007	17.41	24.86
2007/2008	10.09	24.06
2008/2009	4.19	25.68
2009/2010	11.30	21.72
Mean	12.6	27.9
S.D.	5.18	4.60
C.V.	41.05	16.46

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 13.75.% in F/Y 2004/05 and a low ratio of 4.19% in F/Y 2008/2009. Similarly, SCBNL has a high ratio of 33.51% in F/Y 2005/06 and low ratio of 21.72% in 2009/2010. When mean ratio is considered, NABIL seems to be weaker than SCBNL in mobilizing of total assets as Investment in Government securities i.e.

(12.6%<27.9%). Also, when we compare C.V. of both, it reflects that ratios of NABIL are less consistent than SCBNL i.e., (41.05%>16.46%).

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

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

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
2003/2004	0.130	0.047
2004/2005	0.16	0.06
2005/2006	0.46	0.06
2006/2007	1.04	0.16
2007/2008	0.21	0.31
2008/2009	0.19	0.27
2009/2010	0.31	0.27
Mean	0.4	0.2
S.D.	0.30	0.11
C.V.	83.27	63.18

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.

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. In terms of C.V. both the banks has remained fairly consistent though SCBNL's variability is less than that of NABIL i.e., (83.27%<63.18%).

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,

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

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
2003/2004	5.33	8.03
2004/2005	4.74	6.40
2005/2006	4.91	7.37
2006/2007	4.34	6.58
2007/2008	3.49	5.96
2008/2009	3.73	7.43
2009/2010	3.53	6.81
Mean	4.3	6.9
S.D.	0.68	0.66
C.V.	15.74	9.45

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 3.49% in F/Y 2007/08. Similarly, SCBNL recorded a high of 8.03% in F/Y 2003/04 and a low of 5.96% in F/Y 2007/08.

The comparison of mean ratio reveals that SCBNL has a higher ratio than NABIL i.e., 6.9%>4.3%. 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. 15.74%>9.45%. 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,

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

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
2003/2004	2.66	2.25
2004/2005	2.96	2.43
2005/2006	2.80	2.56
2006/2007	2.44	2.42
2007/2008	1.99	2.42
2008/2009	2.35	2.63
2009/2010	2.19	2.76
Mean	2.48	2.49
S.D.	0.32	0.15
C.V.	12.80	6.21

Source: ***Appendix -11***

The above table 4.8 reveals that the ratio of return on total working fund is fluctuating in case of NABIL. NABIL has had a high ratio of 2.96% in F/Y 2004/05 and a low ratio of 1.99% in F/Y 2007/08. Similarly, SCBNL has had a high of 2.76% and a low of 2.25% in F/Y 2009/10 and 2003/04 respectively.

SCBNL has a slightly high mean ratio than NABIL i.e., 2.49>2.48. 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 it assets more efficiently than SCBNL 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. 46.21% < 12.80%. 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
2003/2004	75.10	68.51
2004/2005	74.30	67.29
2005/2006	74.84	67.00
2006/2007	75.87	70.58
2007/2008	79.02	68.06
2008/2009	82.62	68.84
2009/2010	84.83	68.81
Mean	78.1	68.4
S.D.	3.88	1.10
C.V.	4.97	1.60

Source: ***Appendix -12***

The above shows that both the banks have a fluctuating trend of interest earning ratio. The higher and lower ratios of NABIL are 84.83% in F/Y 2009/2010 and 74.30% F/Y 2004/2005 respectively. SCBNL has a high of 70.58% in F/Y 2006/2007 and a low of 67.00% in F/Y 2005/2006.

The mean ratio of NABIL is higher than SCBNL i.e., 78.1%>68.4%. 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,

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

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
2003/2004	6.87	9.56
2004/2005	3.83	5.75
2005/2006	2.87	4.46
2006/2007	5.93	8.08
2007/2008	7.33	5.65
2008/2009	8.89	6.45
2009/2010	2.55	3.77
Mean	5.5	6.2
S.D.	2.25	1.86
C.V.	41.08	29.84

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 8.89% and a low ratio of 2.55%. Similarly, SCBNL has recorded a high of 8.08% and a low of 3.77%.

When mean ratios are taken in to consideration, it is found that SCBNL's liquidity risk is lower than that of NABIL i.e. 6.2 >5.5. 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 tradeoff between liquidity and profitability must be maintained at all times. On comparison of C.V.'s of both the banks, NABIL seems to be more 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,

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

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
2003/2004	60.55	31.63
2004/2005	75.05	43.55
2005/2006	66.79	38.75
2006/2007	66.60	42.61
2007/2008	66.94	46.12
2008/2009	73.87	38.13
2009/2010	69.52	45.35
Mean	68.5	40.9
S.D.	4.55	4.71
C.V.	6.65	11.52

Source: ***Appendix -6***

The above table shows that NABIL ratios are in a decreasing trend till F/Y 2007/2008. There after they have an increasing trend. The ratios of SCBNL have a decreasing trend upto F/Y 2005/2006.

NABIL has a high ratio of 75.05% in F/Y 2004/2005 and a low ratio of 60.55% F/Y 2003/2004. Similarly, SCBNL has had a high ratio of 46.12% in F/Y 2007/2008 and a low ratio of 31.63% in F/Y 2003/2004.

The mean ratio of SCBNL is lower than that of NABIL ie.,40.9%<68.5%.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:

$$\textbf{Factor} = \frac{\textit{Last Year Figure}}{\textit{First Year Figure}}$$

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

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.)	%
2003/2004	14119.03	0	21161.44	0
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	20.65	24647.02	6.88
2007/2008	31915.05	36.73	29743.10	20.68
2008/2009	37348.25	17.02	35871.72	20.61
2009/2010	46410.7	24.26	35182.72	(1.92)
Mean		19.23		8.13
S.D.		12.8		11.3

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 NABIL are significantly higher than SCBNL i.e. 19.23%>8.13. During the study period SCBNL has experienced a negative growth. It also reflects SCBNL dismal performance in collecting more deposits. SCBNL has experienced negative growth rate in F/Y 2004/2005 & 2009/2010. SCBNL has consciously decreased deposits by 8.63 in F/Y 2004/2005 & 1.92% in F/Y 2009/2010 as per its strategy of shedding high cost and unprofitable deposit.

On the contrary, NABIL has been successful in increasing its deposit year after year. 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.)	%
2003/2004	8548.66	0	6693.86	0
2004/2005	10947.00	28.06	8420.86	6.11
2005/2006	12922.54	18.05	8935.42	17.54
2006/2007	15545.77	20.30	10502.64	30.62
2007/2008	21365.05	37.43	13718.59	-0.28
2008/2009	27589.33	29.13	13679.8	16.65
2009/2010	32268.87	16.96	15956.96	15.48
Mean		21.42		13.78
S.D.		11		11.3

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. 21.42%>13.78%. 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. SCBNL has experienced a negative growth in F/Y 2007/2008.

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)	%
2003/2004	5835.95	0	11360.3	0
2004/2005	4267.23	-26.88	9702.55	-14.59
2005/2006	6178.53	44.79	12838.6	32.32
2006/2007	8945.31	44.78	13553.2	5.57
2007/2008	9939.77	11.12	13902.8	2.58
2008/2009	10826.37	8.92	20236.1	45.55
2009/2010	13600.91	25.63	19847.5	-1.92
Mean		15.48		9.93
S.D.		23.7		20.4

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 of26.88 % in F/Y 2004/2005.

On the other hand SCBNL has had a high growth rate of 45.55% in F/Y 2008/2009 and highest negative growth rate of 14.59% in F/Y 2004/2005 & 1.92% in F/Y 2009/2010. The average growth ratio of investment of NABIL seems to be higher than SCBNL i.e., 15.48%>0.93.

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.)	%
2003/2004	455.32	0	537.80	0
2004/2005	519.00	13.99	539.20	0.26
2005/2006	635.26	22.40	658.76	22.17
2006/2007	673.96	6.09	691.67	5.00
2007/2008	746.5	10.76	818.93	18.40
2008/2009	1031.1	38.12	1025.11	25.18
2009/2010	1139.1	10.47	1085.87	5.93
Mean		14.55		10.99
S.D.		11.5		9.8

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 38.12% in F/Y 2008/2009. Similarly, SCBNL has a high growth rate of 25.18% in F/Y 2008/2009 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., 14.55%>10.99%. This is due to a surge in net profit of NABIL by 38.12% in F/Y 2008/2009 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	0.994	0.988	0.0030	0.018
SCBNL	0.93	0.86	0.035	0.214

Source: Appendix A1 and A2

In the table, the coefficient of correlation between deposits and loans and advances in case of NABIL is 0.994. 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 0.988. This means 98.8% of variation of the dependent variable (loan and advances) has been explained by the independent variable (deposit). When the value of 'r' i.e., 0.994 is compared with six times the probable error or 6PEr. i.e., 0.018, we can say that there exists significant relationship between deposits and loan advances because 'r' is higher than six times PEr i.e. 0.994>0.018.

The coefficient of correlation 'r' between deposits and loan and advances incase of SCBNL is 0.93, which gives us an indication of higher positive correlation between them. Similarly, the value of coefficient of determination (r^2) is found to be 0.86. This shows that 86% 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. 0.93>0.214.

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	0.98	0.943	0.0145	0.087
SCBNL	0.96	0.937	0.016	0.096

Source: Appendix A3 and A4

The coefficient of correlation 'r' between deposits and total investment in case of NABIL is 0.98, which indicates a positive correlation between deposits and total investment. Coefficient of determination (r^2) is 0.943. This indicates almost 94.3% of variation of the dependent variable has been explained by independent variable. The value of 'r' i.e. 0.98 is more than six times PEr. This means that there is significant relationship between deposits and total investment.

The coefficient of correlation 'r' between deposits and total investment in case of SCBNL is 0.96, which indicates a positive relationship between the two variables. The coefficient of determination (r^2) is 0.937. This indicates that 93.7% 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 4.18 shows the value of r, r^2, PEr and 6Er 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	0.9754	0.951	0.012	0.074
SCBNL	0.9872	0.974	0.0066	0.040

Source: Appendix A5 and A6

The coefficient of correlation between deposits and net profit in case of NABIL is 0.9754, which shows a positive relationship between deposits and net profit. The coefficient of determination (r^2) is 0.951, which indicates 95.1% of the variation of the dependent variable (net profit) has been explained by the independent variable (deposits). The value of 6PEr is less than 'r' i.e. 0.9754 >0.074. This states that there exists an significant relationship between deposits and net profit.

The coefficient of correlation between deposits and net profit in case of SCBNL is 0.9872, which indicate 97.4% of the variation of the dependent variable has been explained by the independent variable. The value of 'r' is more than 6PEr i.e. 0.9872>0.040, which states that these exists a positive and significant relationship between deposit and net profit.

From the above analysis, it can be concluded that both the banks 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 4.19.

Table 4.19: Correlation between Deposit and Interest Earned

Bank	Evaluation Criteria			
	R	r^2	PEr	6Per
NABIL	0.9733	0.947	0.0135	0.081
SCBNL	0.98	0.96	0.010	0.061

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 0.9733, 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 (r^2) is 0.947, which shows that 94.7% of the variation of dependent variable has been explained by independent variable. The value of six times PEr is less than 'r' i.e. 0.081<0.9733. 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 0.98, which projects a positive relationship between these variables. Its interest income has increased with an increase in total deposits. The coefficient of determination (r^2) is 0.96, which shows that 96% of the variation of dependent variable has been explained by the independent variable. The value of 'r' i.e. 0.98 is greater than six times PEr. This shows that there is a significant 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	0.95	0.914	0.021	0.126
SCBNL	0.90	0.815	0.047	0.29

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 lower than 'r' in both the cases, which states that there does exist significant relationship between loan and advances and interest paid during the study period for the above mentioned banks. In conclusion, 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 Ratio**s:

Under this topic, based on the trend values of deposit from F/Y 2003/2004 to 2009/2010, an attempt has been made to forecast the projection for next five years, i.e. upto F/Y 20014/2015.

The following table 4.21 shows the trend values of deposits from F/Y 2003/2004 to F/Y 2014/2015 .

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

(Rs. Million)

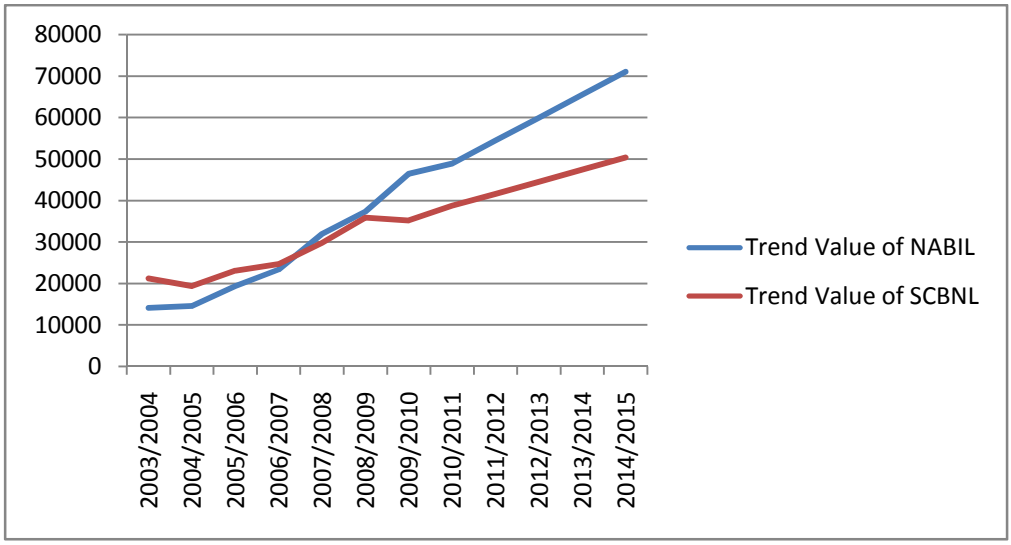
F/Y	Trend Value of NABIL	Trend Value of SCBNL
2003/2004	14119.03	21161.44
2004/2005	14587.00	19,335.09
2005/2006	19347.00	23061.03
2006/2007	23342.00	24647.02
2007/2008	31915.05	29743.10
2008/2009	37348.25	35871.72
2009/2010	46410.7	35182.72
2010/2011	48862.08	38688.76
2011/2012	54396.57	41610.87
2012/2013	59931.05	44532.98
2013/2014	65465.54	47455.1
2014/2015	71000.02	50377.21

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 SCBNL is predicted to be Rs. 50,377.21 million and that of NABIL to be more than 0.71 times the deposit of NABIL by the end of F/Y 2014/2015 i.e. Rs. 71,000.02 million.

From the above trend analysis, it is quite obvious that NABIL's deposit collection is proportionately much better than SCBNL. 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: Tren 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 2003/2004 to 2009/2010 and the forecast for next five years. i.e. from F/Y 2010/2011 to F/Y 2014/2015 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)

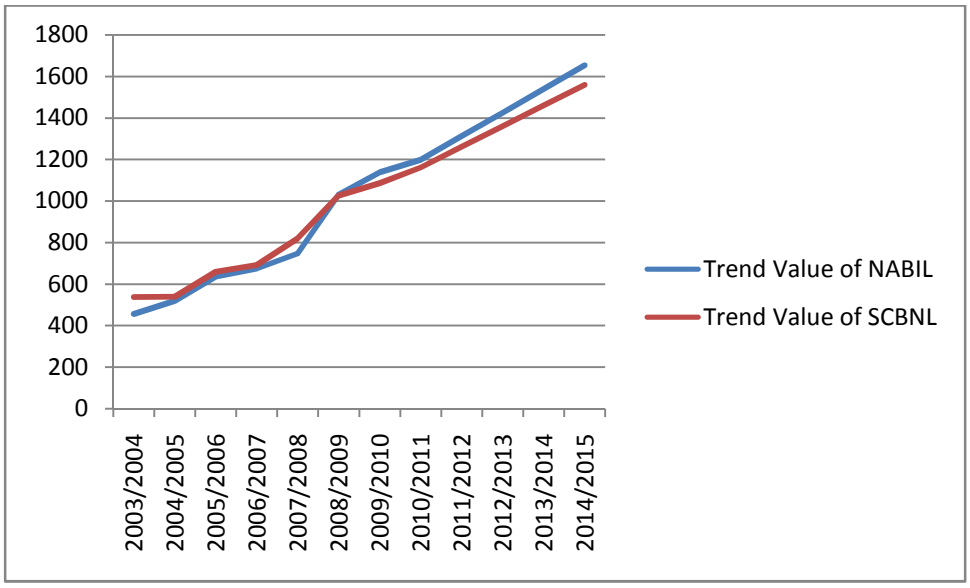
F/Y	Trend Value of NABIL	Trend Value of SCBNL
2003/2004	8548.66	6693.86
2004/2005	10947.00	8420.86
2005/2006	12922.54	8935.42
2006/2007	15545.77	10502.64
2007/2008	21365.05	13718.59
2008/2009	27589.33	13679.8
2009/2010	32268.87	15956.96
2010/2011	34582.15	17285.5
2011/2012	38613.85	18824.44
2012/2013	42645.56	20363.38
2013/2014	46677.27	21902.32
2014/2015	50708.97	23441.26

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 2014/2015 is predicted to be Rs. 50,708.97 million. Similarly, the projection for SCBNL at the end of F/Y 2014/2015 is Rs 23,441.26 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 2003/2004 to 2009/2010, an attempt has been made to forecast the projections for next five years i.e. up to F/Y 2014/2015.

Table 4.23 shows the trend value investment from F/Y 2003/2004 to F/Y 2014/2015

Table 4.23: Trend Values of Investment of NABIL and SCBNL

(Rs. Million)

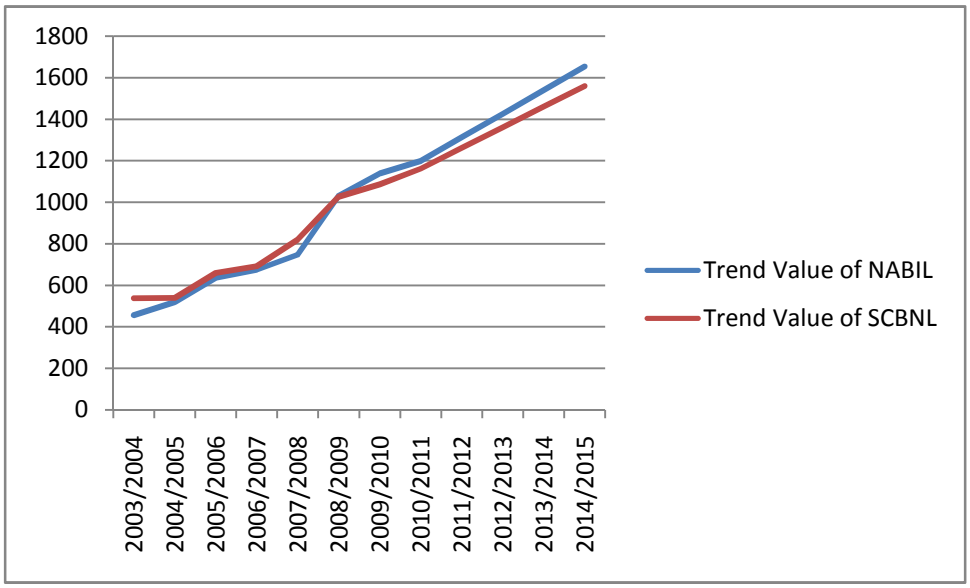
F/Y	Trend Value of NABIL	Trend Value of SCBNL
2003/2004	5835.95	11360.33
2004/2005	4267.23	9702.55
2005/2006	6178.53	12838.55
2006/2007	8945.31	13553.23
2007/2008	9939.77	13902.81
2008/2009	10826.37	20236.12
2009/2010	13600.91	19847.51
2010/2011	14252.64	21290.58
2011/2012	15687.44	22990.33
2012/2013	17122.24	24690.07
2013/2014	18557.04	26389.82
2014/2015	19991.84	28089.57

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 28,089.57 Rs. 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 2003/2004 to 2009/2010, an attempt has been made to forecast the projections for next five years i.e. upto F/Y 2014/2015.

The information presented in table 4.24 communicates the trend value of net profit from F/Y 2003/2004 to F/Y 2014/2015.

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

(Rs. Million)

F/Y	Trend Value of NABIL	Trend Value of SCBNL
2003/2004	455.32	537.80
2004/2005	519.00	539.20
2005/2006	635.26	658.76
2006/2007	673.96	691.67
2007/2008	746.5	818.93
2008/2009	1031.1	1025.11
2009/2010	1139.1	1085.87
2010/2011	1198.146	1161.934
2011/2012	1311.959	1261.084
2012/2013	1425.773	1360.234
2013/2014	1539.586	1459.384
2014/2015	1653.4	1558.534

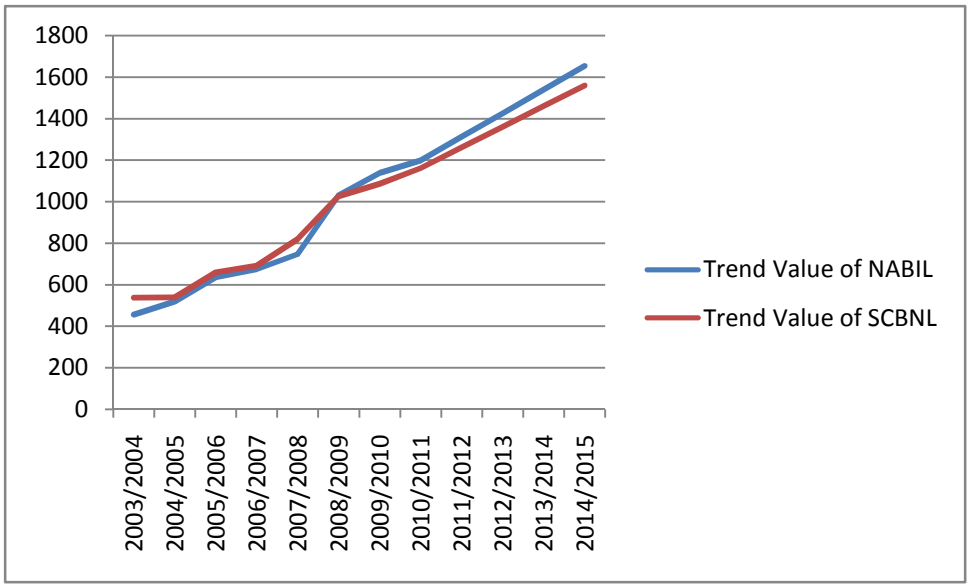
Source: Appendix A17 and A18

However, we can draw a conclusion that 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 2014/2015 i.e. Rs. 1653.4 million. In case of SCBNL net profit will be Rs 1558.534 million in F/Y 2014/2015, 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.

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 live 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 SCBNL bank will exceed the net profit of NABIL in the days ahead. This is so because the profit of SCBNL is growing at steeper rate than NABIL.

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 NABIL is significantly higher than SCBNL.
- 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 NABIL is slightly higher than SCBNL.
- 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 SCBNL is higher than NABIL.
- The coefficient of correlation between total loans and advances and interest paid is higher in NABIL than that of SCBNL.

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.

Incase 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 both the banks have an increasing trend. The total deposit of NABIL is predicted to be Rs. 71000.02 million and that of SCBNL to be Rs.50,377.21 million at the end of F/Y 2014/2015. The deposit collection of NABIL is much better than SCBNL.
- The loan and advance of both the banks have an increasing trend. The total loan and advance of NABIL is predicted to be Rs. 50,708.97 million and that of SCBNL to be Rs. 23,441.26 million at the end of F/Y 2014/2015. The trend of loan and advances of NABIL is much better compared to SCBNL.
- The total investments of SCBNL have formed an increasing trend. 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. 1,653.4 million and Rs. 1,558.534 million respectively by the end of F/Y 2014/2015. 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 and NABIL 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, both the bank are 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. Both the bank have introduced a saving plus deposit scheme a few years back to target high-end depositors. Like others, it also needs to come up with various incentives, schemes, and facilities to increase deposits.

- 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 18 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, 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..

- **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. 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 Limited

Nabil Bank limited is the first joint venture bank of Nepal. 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. It started operations in July 1984, with the objective of extending international standard modern banking services to various sector of the society.

The bank is managed by a team of qualified and highly experienced professionals. 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 bank provides a complete range of personal, commercial and corporate banking and related financial services through its 50 branches and 2 airport counters. 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.

Share capital of Nabil Bank ltd (as at July 2011)

Share Capital	**Amount (NRs)**
Authorized Capital 16,000,000@100	1,600,000,000
Issued Capital 14,491,240@100	1,449,124,000
Paid up Capital 14,491,240@100	1,449,124,000

Standard Chartered Bank Nepal Ltd.

Standard Chartered Bank Nepal Limited has been in operation in Nepal since 1987 when it was initially registered as a joint-venture operation. Today the Bank is an integral part of Standard Chartered Group having an ownership of 75% in the company with 25% shares owned by the Nepalese public. The Bank enjoys the status of the largest international bank currently operating in Nepal.

Standard Chartered has a history of over 150 years in banking and operates in many of the world's fastest-growing markets with an extensive global network of over 1750 branches (including subsidiaries, associates and joint ventures) in over 70 countries in the Asia Pacific Region, South Asia, the Middle East, Africa, the United Kingdom and the Americas. As one of the world's most international banks, Standard Chartered employs almost 75,000 people, representing over 115 nationalities, worldwide. This diversity lies at the heart of the Bank's values and supports the Bank's growth as the world increasingly becomes one market.

With 19 points of representation, 23 ATMs across the country and with more than 425 local staff, Standard Chartered Bank Nepal Ltd. is in a position to serve its customers through an extensive domestic network. In addition, the global network of Standard Chartered Group gives the Bank a unique opportunity to provide truly international banking services in Nepal.

Standard Chartered Bank Nepal Limited offers a full range of banking products and services in Consumer banking, Wholesale and SME Banking catering to a wide range of customers encompassing individuals, mid-market local corporate, multinationals, large public sector companies, government corporations, airlines, hotels as well as the DO segment comprising of embassies, aid agencies, NGOs and INGOs.

The Bank has been the pioneer in introducing 'customer focused' products and services in the country and aspires to continue to be a leader in introducing new products in delivering superior services. It is the first Bank in Nepal that has implemented the Anti-Money Laundering policy and applied the 'Know Your Customer' procedure on all the customer accounts.

Corporate Social Responsibility is an integral part of Standard Chartered's ambition to become the world's best international bank and is the mainstay of the Bank's values. The Bank believes in delivering shareholder value in a socially, ethically an environmentally responsible manner. Standard Chartered throughout its long history has played an active role in supporting those communities in which its customers and staff live. It concentrates on projects that assist children, particularly in the areas of health and education. Environmental projects are also occasionally considered. It supports non-governmental organisations involving charitable community activities The Group launched two major initiatives in 2003 under its 'Believing in Life' campaign- 'Living with HIV/AIDS' and 'Seeing is Believing'.

Share capital of Standard Chartered Bank ltd (as at July 2010)

Share Capital	Amount (NRs)
Authorized Capital 20,000,000@100	2,000,000,000
Issued Capital 13,984,836@100	1,398,483,600
Paid up Capital 13,984,836@100	1,398,483,600

Appendix -2

NABIL BANK LTD

(Rs in million)

S.N.	F/Y	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
1	Current Assets	16742.67	17027.75	22010.97	26967.39	36534.72	43206.40	51370.70
2	Current Liabilities	15263.80	15528.69	20455.63	25197	34455.56	40437.16	48015.49
3	Cash and Bank Balance	970.49	559.38	556.16	1383.81	2340.83	3322.93	1185.44
4	Total Investment	5835.95	4267.23	6178.53	8945.31	9939.77	10826.37	13600.91
5	Total Deposit	14119.03	14587	19347.39	23342.28	31915.05	37348.25	46410.7
6	Loan and Advances	8548.66	10947	12922.54	15545.77	21365.05	27589.33	32268.87
7	Investment in Government Securities	3672.63	2413	2301.46	4808.35	3788.33	1838.81	5865.88
8	Investment on Shares and Debenture.	22.22	27.36	27.56	57.85	80.55	82.50	159.85
9	Total Working Fund	17104.27	17546.89	22688.33	27620.56	37553.96	43849.79	51920.36
10	Total Interest Earned	1001.62	1068.74	1309.99	1587.75	1978.7	2798.5	4047
11	Total Interest Paid	282.95	2.43.54	357.16	555.71	758.4	1153.3	1960.1
12	Net Profit	455.32	520.11	635.26	673.96	746.5	1031.1	1139.1
13	Operating Income	1333.65	1438.44	1750.44	2092.81	2504.04	3387.07	4770.44

Source: Annual Report 2003/04 to Annual Report 2009/10

Appendix –3

STANDARD CHARTERED BANK NEPAL LTD.

(Rs. in million)

S.N	F/Y	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
1	Current Assets	23778.25	22086.48	24097.83	26987.47	33218.51	40450.17	40094.77
2	Current Liabilities	22146.32	20311.16	23530	25274	30843.22	37535	36843.61
3	Cash and Bank Balance	2023.16	1111.11	1029.25	1992.17	1681.15	2314.48	1328.54
4	Total Investment	11360.33	9702.5	12838.55	13553.23	13902.81	20236.12	19847.51
5	Total Deposit	21161.44	19335.09	23061.03	24647.02	29743.10	35871.72	35182.72
6	Loan and Advances	6693.86	8420.86	8935.42	10502.64	13718.59	13679.8	15956.96
7	Investment in Government Securities	7948.22	7203.06	8635.88	7107.93	8137.61	9998.75	8531.51
8	Investment on Share and Debenture	11.195	13.348	15.34	44.94	106.04	106.92	106.92
9	Total Working Fund	23925.68	22171.24	26305.11	29165.45	33820.07	38941.07	39271.36
10	Total Interest earned	1042.18	1058.67	1189.60	1411.98	1591.19	1887.22	2042.10
11	Total Interest paid	275.81	254.13	303.19	413.05	471.72	543.8	575.74
12	Net profit	537.8	539.20	658.76	691.67	818.93	1025.11	1085.87
13	Operating Income	1521.16	1573.32	1775.44	2000.62	2338.13	2759.04	2968.01

Source: Annual Report 2003/04 to Annual Report 2009/10

Appendix –4

NABIL BANK LTD

Cash and Bank Balance to Total Deposit Ratio

F/Y	*Cash & Bank Balance*	*Total Deposit*	*Percentage*
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
2007/2008	2340.83	31915.05	7.33
2008/2009	3322.93	37348.25	8.89
2009/2010	1185.44	46410.7	2.55

STANDARD CHARTERED BANK NEPAL LTD

Cash and Bank Balance to Total Deposit Ratio

F/Y	*Cash & Bank Balance*	*Total Deposit*	*Percentage*
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
2007/2008	1681.15	29743.10	5.65
2008/2009	2314.48	35871.72	6.45
2009/2010	1328.54	35182.72	3.77

Appendix –5

NABIL BANK LTD

Cash and Bank Balance to Current Asset

F/Y	*Cash & Bank Balance*	*Current Asset*	*Percentage*
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
2007/2008	2340.83	36534.72	6.41
2008/2009	3322.93	43206.40	7.69
2009/2010	1185.44	51370.70	2.31

STANDARD CHARTERED BANK NEPAL LTD

Cash and Bank Balance to Current Asset

F/Y	*Cash & Bank Balance*	*Current Asset*	*Percentage*
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
2007/2008	1681.15	33218.51	5.06
2008/2009	2314.48	40450.17	5.72
2009/2010	1328.54	40094.77	3.31

Appendix -6

NABIL BANK LTD

Loan and Advances to Total Deposit Ratio

F/Y	*Loan and Advance*	*Total Deposit*	*Percentage*
2003/2004	8548.66	14119.03	60.55
2004/2005	10947.00	14587.00	75.05
2005/2006	12922.54	19347.00	66.79
2006/2007	15545.77	23342.00	66.60
2007/2008	21365.05	31915.05	66.94
2008/2009	27589.33	37348.25	73.87
2009/2010	32268.87	46410.7	69.52

STANDARD CHARTERED BANK NEPAL LTD

Loan and Advances to Total Deposit Ratio

F/Y	*Loan and Advances*	*Total Deposit*	*Percentage*
2003/2004	6693.86	21161.44	31.63
2004/2005	8420.86	19,335.09	43.55
2005/2006	8935.42	23061.03	38.75
2006/2007	10502.64	24647.02	42.61
2007/2008	13718.59	29743.10	46.12
2008/2009	13679.8	35871.72	38.13
2009/2010	15956.96	35182.72	45.35

Appendix –7

NABIL BANK LTD

Total Investment to Total Deposit Ratio

F/Y	*Total Investment*	*Total Deposit*	*Percentage*
2003/2004	5835.95	14119.03	41.33
2004/2005	4267.23	14587.00	29.25
2005/2006	6178.53	19347.00	31.93
2006/2007	8945.31	23342.00	38.32
2007/2008	9939.77	31915.05	31.14
2008/2009	10826.37	37348.25	28.99
2009/2010	13600.91	46410.7	29.31

STANDARD CHARTERED BANK NEPAL LTD

Total Investment to Total Deposit Ratio

F/Y	*Total Investment*	*Total Deposit*	*Percentage*
2003/2004	11360.33	21161.44	53.68
2004/2005	9702.55	19,335.09	50.18
2005/2006	12838.55	23061.03	55.67
2006/2007	13553.23	24647.02	54.99
2007/2008	13902.81	29743.10	46.74
2008/2009	20236.12	35871.72	56.41
2009/2010	19847.51	35182.72	56.41

Appendix –8

NABIL BANK LTD

Investment in Government Securities to Total Working Fund Ratio

F/Y	*Investment in Government Securities*	*Total Working Fund*	*Percentage*
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
2007/2008	3788.33	37553.96	10.09
2008/2009	1838.81	43849.79	4.19
2009/2010	5865.88	51920.36	11.30

STANDARD CHARTERED BANK NEPAL LTD

Investment in Government Securities to Total Working Fund Ratio

F/Y	*Investment in Government Securities*	*Total Working Fund*	*Percentage*
2003/2004	7948.22	23925.68	33.22
2004/2005	7203.06	22171.24	32.49
2005/2006	8635.88	25767.35	33.51
2006/2007	7107.94	28596.68	24.86
2007/2008	8137.61	33820.07	24.06
2008/2009	9998.75	38941.07	25.68
2009/2010	8531.51	39271.36	21.72

Appendix -9

NABIL BANK LTD

Investment in Share & Debentures to Total Working Fund Ratio

F/Y	*Investment in Share & Debenture*	*Total Working Fund*	*Percentage*
2003/2004	22.22	17104.27	0.130
2004/2005	27.36	17546.89	0.16
2005/2006	104.18	22688.33	0.46
2006/2007	286.95	27620.38	1.04
2007/2008	80.55	37553.96	0.21
2008/2009	82.50	43849.79	0.19
2009/2010	159.85	51920.36	0.31

STANDARD CHARTERED BANK NEPAL LTD

Investment in Share & Debentures to Total Working Fund Ratio

F/Y	*Investment in Share & Debenture*	*Total Working Fund*	*Percentage*
2003/2004	11.195	23925.68	0.047
2004/2005	13.348	22171.24	0.06
2005/2006	15.34	25767.35	0.06
2006/2007	44.94	28596.68	0.16
2007/2008	106.04	33820.07	0.31
2008/2009	106.92	38941.07	0.27
2009/2010	106.92	39271.36	0.27

Appendix -10

NABIL BANK LTD

Return on Loan and Advances Ratio

F/Y	*Net Profit*	*Loan and Advances*	*Percentage*
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
2007/2008	746.5	21365.05	3.49
2008/2009	1031.1	27589.33	3.73
2009/2010	1139.1	32268.87	3.53

STANDARD CHARTERED BANK NEPAL LTD

Return on Loan and Advances Ratio

F/Y	*Net Profit*	*Loan and Advances*	*Percentage*
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
2007/2008	818.93	13718.59	5.96
2008/2009	1025.11	13679.8	7.43
2009/2010	1085.87	15956.96	6.81

Appendix -11

NABIL BANK LTD

Return on Total Working Fund Ratio

F/Y	*Net profit*	*Total Working Fund*	*Percentage*
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
2007/2008	746.5	37553.96	1.99
2008/2009	1031.1	43849.79	2.35
2009/2010	1139.1	51920.36	2.19

STANDARD CHARTERED BANK NEPAL LTD

Return on Total Assets Ratio

F/Y	*Net profit*	*Total Working Fund*	*Percentage*
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
2007/2008	818.93	33820.07	2.42
2008/2009	1025.11	38941.07	2.63
2009/2010	1085.87	39271.36	2.76

Appendix -12

NABIL BANK LTD

Total Interest Earned to Total Operating Income Ratio

F/Y	*Total Interest Earned*	*Total Operating Income*	*Percentage*
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
2007/2008	1978.7	2504.04	79.02
2008/2009	2798.5	3387.07	82.62
2009/2010	4047	4770.44	84.83

STANDARD CHARTERED BANK NEPAL LTD

Total Interest Earned to Total Operating Income Ratio

F/Y	*Total Interest Earned*	*Total Operating Income*	*Percentage*
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
2007/2008	1591.19	2338.13	68.06
2008/2009	1887.22	2759.04	68.84
2009/2010	2042.10	2968.01	68.81

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-26724.15)	x^2	y = (y- $\bar{y}$) (y-18455.32)	Y^2	XY
03/04	14119.03	8548.66	-12605.1	158888978	-9906.66	98141855.75	124874574
04/05	14587.00	10947.00	-12137.1	147310341	-7508.32	56374826.32	91129550
05/06	19347.00	12922.54	-7377.15	54422300	-5532.78	30611622.91	40816111
06/07	23342.00	15545.77	-3382.15	11438919	-2909.55	8465464.577	9840516.6
07/08	31915.05	21365.05	5190.903	26945472	2909.733	8466545.3	15104141
08/09	37348.25	27589.33	10624.1	112871562	9134.013	83430190.87	97040692
09/10	46410.7	32268.87	19686.55	387560363	13813.55	190814242.5	271941238
	ϕx=187069	ϕy=129187.2		ϕx^2= 899437936		ϕy2= 476304748.3	ϕxy= 650746823

Here, N = 7

$\bar{X}$ $=Ex/N$ =187069/7 =26724.15

$\bar{y}$ $=Ey/N$ =129187.2/7 =18455.32

We have,

ϕx^2 =899437936
ϕy^2 = 476304748.3
ϕxy = 650746823

Calculation of correlation coefficient (r) :

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

r = 650746823/654527737.8
= 0.994

or r = 0.994 r2 = 0.988

Calculation of Probable error,

$$\text{P. Er.} = 0.6745\ \frac{1 Z r^2}{\sqrt{N}} = 0.0030$$

Or P. Er= 0.0030 6. P. Er. = 0.018

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-27000.3	x^2	y = (y- $\bar{y}$) (y-11129.73)	Y^2	XY
03/04	21161.44	6693.86	-5838.86	34092319	-4435.87	19676968	25900453
04/05	19,335.09	8420.86	-7665.21	58755488	-2708.87	7337992.156	20764087
05/06	23061.03	8935.42	-3939.27	15517871	-2194.31	4815008.915	8643997.1
06/07	24647.02	10502.64	-2353.28	5537940.2	-627.093	393245.4515	1475726.9
07/08	29743.10	13718.59	2742.797	7522936.2	2588.857	6702181.306	7100710
08/09	35871.72	13679.8	8871.417	78702042	2550.067	6502842.433	22622709
09/10	35182.72	15956.96	8182.417	66951950	4827.227	23302121.89	39498386
	ϕx= 189002.1	ϕY= 77908.13		ϕx^2= 267080547		ϕy^2= 68730360.16	ϕxy= 126006070

Here, N = 7

$\bar{X}$ =*Ex/N* =189002.1/*7* =27000.3

$\bar{y}$ =*Ey/N* =77908.13/*7* =11129.73

We have,

ϕx^2 = 267080547
ϕy^2 = 68730360.16
ϕxy = 126006070

Calculation of correlation coefficient (r) :

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

r = 126006070/135486317.4
= 0.93

or r = 0.93 r2 = 0.86

Calculation of Probable error,

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

Or, P. Er. = 0.035 6 P. Er. = 0.214

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

F/Y	Deposit (X)	Total Investment(Y)	X=(x- $\bar{x}$) (x-26724.15)	x^2	y = (y- $\bar{y}$) (y-8513.439)	Y^2	XY
03/04	14119.03	5835.95	-12605.1	158888978	-2677.49	7168945.05	33750057
04/05	14587.00	4267.23	-12137.1	147310341	-4246.21	18030287.23	51536858
05/06	19347.00	6178.53	-7377.15	54422300	-2334.91	5451798.037	17224964
06/07	23342.00	8945.31	-3382.15	11438919	431.8714	186512.9308	-1460653
07/08	31915.05	9939.77	5190.903	26945472	1426.331	2034421.344	7403947.9
08/09	37348.25	10826.37	10624.1	112871562	2312.931	5349651.793	24572821
09/10	46410.7	13600.91	19686.55	387560363	5087.471	25882365.54	100154775
	ϕx= 187069	ϕY= 59594.07		ϕx2= 899437936		ϕy2= 64103981.92	ϕxy= 233182771

Here, N = 7

$\bar{X} = Ex/N = 187069/7 = 26724.15$

$\bar{y} = Ey/N = 59594.07/7 = 9537.33$

We have,

$\phi x^2 = 899437936$
$\phi y^2 = 64103981.92$
$\phi xy = 233182771$

Calculation of correlation coefficient (r) :

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

r = 233182771/240119872.5

or, r = 0.98 $r^2 = 0.943$

Calculation of Probable error,

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

Or, P. Er. = 0.0145 6 P. Er. = 0.087

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

F/Y	Deposit (X)	Total Investment (Y)	X=(x- $\bar{x}$) (x-27000.3)	x^2	y = (y- $\bar{y}$ (y-14491.59)	Y^2	XY
03/04	21161.44	11360.33	-5838.86	34092319	-3131.26	9804762.348	18282973
04/05	19,335.09	9702.55	-7665.21	58755488	-4789.04	22934863.07	36708978
05/06	23061.03	12838.55	-3939.27	15517871	-1653.04	2732527.073	6511758.7
06/07	24647.02	13553.23	-2353.28	5537940.2	-938.356	880511.4465	2208216.4
07/08	29743.10	13902.81	2742.797	7522936.2	-588.776	346656.8417	-1614892
08/09	35871.72	20236.12	8871.417	78702042	5744.534	32999674.16	50962160
09/10	35182.72	19847.51	8182.417	66951950	5355.924	28685924.95	43824407
	ϕx= 189002.1	ϕY= 101441.1		ϕx2= 267080547		ϕy2= 98384919.9	ϕxy= 156883600

Here, N = 7

$\bar{X}$ = Ex/N = 189002.1/7 = 27000.3

$\bar{y}$ = Ey/N = 101441.1/7 = 14491.59

We have,

$\phi x^2 = 267080547$
$\phi y^2 = 98384919.9$
$\phi xy = 156883600$

Calculation of correlation coefficient (r) :

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

r = 156883600/162100889

or r = 0.96 $r^2 = 0.937$

Calculation of Probable error,

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

Or, P. Er. = 0.016 6 P. Er. = 0.096

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

F/Y	Total Deposits (X)	Net Profit (Y)	X=(x- $\bar{x}$) (x-26724.14	x^2	y = (y- $\bar{y}$) (y-742.89)	Y^2	XY
03/04	14119	455.32	-12605.1	158889626.4	-287.57143	82697.32653	3624878.9
04/05	14587.00	519.00	-12137.1	147310236.7	-223.89143	50127.37179	2717402.3
05/06	19347.00	635.26	-7377.14	54422236.73	-107.63143	11584.52442	794012.42
06/07	23342.00	673.96	-3382.14	11438890.31	-68.93143	4751.541845	233135.94
07/08	31915.05	746.5	5190.907	26945516.97	3.60857	13.02178776	18731.759
08/09	37348.25	1031.1	10624.11	112871652.6	288.20857	83064.18064	3061958.7
09/10	46410.7	1139.1	19686.56	387560532.1	396.20857	156981.2321	7799982.7
	ϕx= 187069	ϕY= 5200.24		ϕx^2= 899438691.9		ϕy^2= 389219.1991	ϕxy= 18250103

Here, N = 7

$\bar{X}$ =*Ex/N* =187069*/7* =26724.14

$\bar{y}$ =*Ey/N* =*6089.09/7* =742.89

We have,

ϕxy =18250103
ϕx^2 = 899438691.9
ϕy2 = 389219.1991

Calculation of correlation coefficient (r) :

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

r =18250103/18710393.03

or r = 0.9754 r^2 = 0.951

Calculation of Probable error,

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

Or, P. Er. = 0.012 6 P. Er. = 0.074

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

F/Y	Total Deposits(X)	Net Profit (Y)	X=(x- $\bar{x}$) (x-27000.3	x^2	y = (y- $\bar{y}$) (y-765.3343	Y^2	XY
03/04	21161.4	537.80	-5838.9	34092719.84	-227.53429	51771.85118	1328549.3
04/05	19,335.09	539.20	-7665.21	58755400.54	-226.13429	51136.71518	1733366.1
05/06	23061.03	658.76	-3939.27	15517825.62	-106.57429	11358.07838	419824.58
06/07	24647.02	691.67	-2353.28	5537913.311	-73.66429	5426.42699	173352.48
07/08	29743.10	818.93	2742.803	7522967.513	53.59571	2872.50059	147002.48
08/09	35871.72	1025.11	8871.423	78702143.51	259.77571	67483.42173	2304580.2
09/10	35182.72	1085.87	8182.423	66952043.81	320.53571	102743.1441	2622758.8
	ϕx= 189002.1	ϕY= 5357.34		ϕx^2= 267081014.2		ϕy^2= 292792.1382	ϕxy= 8729433.9

Here, N = 7

$\bar{X}$ = *Ex/N* = 189002.1/*7* = 27000.3

$\bar{y}$ = *Ey/N* = 5357.34/*7* = 765.3343

We have,

ϕxy = 8729433.9
ϕx^2 = 267081014.2
ϕy2 = 292792.1382

Calculation of correlation coefficient (r) :

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

r = 8729433.9/8843032.353

or r = 0.9872 r^2 = 0.974

Calculation of Probable error,

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

Or, P. Er. = 0.0066 6 P. Er. = 0.040

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

F/Y	Total Deposits (X)	Interest Earned (Y)	X=(x- $\bar{x}$) (x-26724.14	x^2	y = (y- $\bar{y}$) (y-1970.32)	Y^2	XY
03/04	14119	1001.62	-12605.1	158889626.4	-968.70857	938396.2964	12210710
04/05	14587.00	1068.74	-12137.1	147310236.7	-901.58857	812861.9521	10942709
05/06	19347.00	1309.99	-7377.14	54422236.73	-660.33857	436047.0289	4871412
06/07	23342.00	1587.75	-3382.14	11438890.31	-382.57857	146366.3633	1293935.4
07/08	31915.05	1978.7	5190.907	26945516.97	8.37143	70.08081633	43455.308
08/09	37348.25	2798.5	10624.11	112871652.6	828.17143	685867.9151	8798582
09/10	46410.7	4047	19686.56	387560532.1	2076.6714	4312564.222	40882511
	ϕx= 187069	ϕY= 13792.3		ϕx^2= 899438691.9		ϕy^2= 7332173.859	ϕxy= 79043315

Here, N = 7

$\bar{X}$ $= Ex/N = 187069/7 = 26724.14$

$\bar{y}$ $= Ey/N = 13792.3/7 = 1970.329$

We have,

$\phi xy = 79043315$
$\phi x^2 = 899438691.9$
$\phi y^2 = 7332173.859$

Calculation of correlation coefficient (r) :

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

r = 79043315/81208625.55
or, r = 0.9733 $r^2 = 0.947$

Calculation of Probable Error

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

P. E.r. = 0.0135 6 P.E.r. = 0.081

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

F/Y	Total Deposits (X)	Interest Earned (Y)	X=(x- $\bar{x}$) (x-27000.3)	x^2	y = (y- $\bar{y}$) (y-1460.421)	Y^2	XY
03/04	21161.4	1042.18	-5838.9	34092719.84	-418.24143	174925.8926	2442068.7
04/05	19,335.09	1058.67	-7665.21	58755400.54	-401.75143	161404.2104	3079507.9
05/06	23061.03	1189.60	-3939.27	15517825.62	-270.82143	73344.24617	1066838
06/07	24647.02	1411.99	-2353.28	5537913.311	-48.43143	2345.603273	113972.57
07/08	29743.10	1591.19	2742.803	7522967.513	130.76857	17100.41927	358672.41
08/09	35871.72	1887.22	8871.423	78702143.51	426.79857	182157.0206	3786310.6
09/10	35182.72	2042.10	8182.423	66952043.81	581.67857	338349.9605	4759540
	ϕx= 189002.1	ϕY= 10222.95		ϕx^2= 267081014.2		ϕy^2= 949627.3527	ϕxy= 949627.3527

Here, N = 7

$\bar{X}$ = *Ex/N* = 189002.1/*7* = 27000.3

$\bar{y}$ = *Ey/N* = 10222.95/*7* = 1460.421

We have,

ϕxy = 949627.3527
ϕx^2 = 267081014.2
ϕy^2 = 949627.3527

Calculation of correlation coefficient (r) :

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

r =949627.3527/15925684.8

or, r = 0.98 r^2 = 0.96

Calculation of P. Er.

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

P. E.r. = 0.010 6 P.E.r. = 0.061

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

F/Y	Loan & Advances (X)	Interest paid (Y)	X=(x- $\bar{x}$) (x-18455.32)	x^2	y = (y- $\bar{y}$) (y-758.737)	Y^2	XY
03/04	8548.66	282.95	-9906.7	98141855.7	-475.8	226373.4	4713460.1
04/05	10947.00	243.54	-7508.3	56374826.3	-515.2	265428.1	3868263.5
05/06	12922.54	357.16	-5532.8	30611622.9	-401.6	161264.2	2221836.8
06/07	15545.77	555.71	-2909.5	8465464.6	-203.0	41220.0	590717.0
07/08	21365.05	758.4	2909.7	8466545.3	-0.3	0.1	-981.0
08/09	27589.33	1153.3	9134.0	83430190.9	394.6	155679.8	3603942.2
09/10	32268.87	1960.1	13813.6	190814242.5	1201.4	1443272.7	16595089.3
	ϕx= 129187.2	ϕY= 5311.16		ϕx^2= 476304748.3		ϕy^2= 2293238.4	ϕxy= 31592328

Here, N = 7

$\bar{X}$ = *Ex/N* = 129187.2*/7* = 18455.32

$\bar{y}$ = *Ey/N* = 5311.16*/7* = 758.7371

We have,

$\phi xy = 31592328$

$\phi x^2 = 476304748.3$

$\phi y^2 = 2293238.4$

Calculation of correlation coefficient (r) :

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

r = 31592328/33049664.73

r = 0.95 $r^2 = 0.914$

Calculation of Probable Error

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

P. Er. =0.021 6 P. Er. = 0.126

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-11129.7)	x^2	y = (y- $\bar{y}$) (y-512.3)	Y^2	XY
03/04	6693.86	275.81	-4435.9	19676968.0	-236.5	55948.5	1049236.0
04/05	8420.86	303.19	-2708.9	7337992.2	-209.2	43745.5	566572.4
05/06	8935.42	413.05	-2194.3	4815008.9	-99.3	9859.4	217882.7
06/07	10502.64	471.72	-627.1	393245.5	-40.6	1650.3	25475.2
07/08	13718.59	543.8	2588.9	6702181.3	31.5	989.5	81434.4
08/09	13679.8	575.74	2550.1	6502842.4	63.4	4019.0	161663.3
09/10	15956.96	1003.10	4827.2	23302121.9	490.8	240841.2	2368989.3
	ϕx= 77908.1	ϕY= 3586.4		ϕx^2= 68730360.16		ϕy^2= 357053.32	ϕxy= 5119404

Here, N = 7

$\bar{X}$ =*Ex/N* =77908.1*/7* =11129.7

$\bar{y}$ =*Ey/N* =3586.4*7* =512.3

We have,

$\phi xy = 4471253.3$
$\phi x^2 = 68730360.16$
$\phi y^2 = 357053.321$

Calculation of correlation coefficient (r) :

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

r = 4471253.3/4953827.141

Or, r = 0.90 $r^2 = 0.815$

Calculation of Probable Error

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

P. E.r. = 0.047 6 P.E.r. = 0.29

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

(Rs. in million)

F/Y	Total Deposits (y)	x=T- 2007/2008	x^2	xy	y = a + bx Trend Values
03/04	14119.03	-3	9	-42357.1	10120.69
04/05	14587.00	-2	4	-29174	15655.18
05/06	19347.00	-1	1	-19347	21189.66
06/07	23342.00	0	0	0	26724.15
07/08	31915.05	1	1	31915.05	32258.63
08/09	37348.25	2	4	74696.5	37793.12
09/10	46410.7	3	9	139232.1	43327.6
	ϕy =187069	ϕx=0	ϕx^2=28	ϕxy=154965.6	

Here, N = 7

Or a = ϕy /N =187069/7 or , a =26724.15

b = ϕxy/ ϕx^2 = 154965.6/28 or , b =5534.484

Let the trend line be,

y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (ii)

ϕxy = a ϕx + b ϕ x^2 ..... (iii)

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

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

…The straight line trend for total deposits is,

y = a + bx| 26724.15+5534.484

For year 2011/2012, y = a + bx| 26724.15+5534.484 | 4

x = 4

y = Rs. 48862.08million

Other trend values have been calculated accordingly.

(Rs. in Million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	48862.08
2011/2012	5	54396.57
2012/2013	6	59931.05
2013/2014	7	65465.54
2014/2015	8	71000.02

Appendix A - 12

SCBNL

The Trend value of Total Deposits of SCBNL

(Rs. in million)

F/Y	Total Deposits (y)	x=t- 2006/2007	x^2	Xy	y = a + bx Trend Values
03/04	21161.44	-3	9	-63484.3	18233.96
04/05	19,335.09	-2	4	-38670.2	21156.08
05/06	23061.03	-1	1	-23061	24078.19
06/07	24647.02	0	0	0	27000.3
07/08	29743.10	1	1	29743.1	29922.42
08/09	35871.72	2	4	71743.44	32844.53
09/10	35182.72	3	9	105548.2	35766.64
	ϕy = 189002.1	ϕx=0	ϕx^2=28	ϕxy=81819.17	

Here, N = 7

or, a = Ey/N = 189002.1/7 or , a =27000.3

b = Exy/Ex2 = 81819.17/28 or , b =2922.113

Let the trend line be,

y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (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)

…The straight line trend for total deposits is,

y = a + bx⎪ 27000.3+ 2922.113X x4

For year 2010/2011, y = a + bx⎪ 27000.3+2922.113X4

x = 4

y = Rs. 38,688.76 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	38688.76
2011/2012	5	41610.87
2012/2013	6	44532.98
2013/2014	7	47455.1
2014/2015	8	50377.21

Appendix A - 13

NABIL
The Trend value of Loan and Advances of NABIL

(Rs. in million)

F/Y	Loan and Advances (y)	x=t- 2006/2007	x^2	Xy	y = a + bx Trend Values
03/04	8548.66	-3	9	-25646	6360.196
04/05	10947.00	-2	4	-21894	10391.9
05/06	12922.54	-1	1	-12922.5	14423.61
06/07	15545.77	0	0	0	18455.32
07/08	21365.05	1	1	21365.05	22487.02
08/09	27589.33	2	4	55178.66	26518.73
09/10	32268.87	3	9	96806.61	30550.44
	ϕy =129187.2	ϕx=0	ϕx^2=28	ϕxy=112887.8	

or, a = Ey/N = 129187.2/7 or , a = 18455.32
b = Exy/Ex2 = 112887.8/28 or , b = 4031.707

Let the trend line be,

y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (ii)

ϕxy = a ϕx + b ϕ 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| 18455.32+ 4031.707 | x

For year 2010/2011, y = a + bx| 18455.32+4031.707 | 4
x = 4 y = Rs.34,582.15million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	34582.15
2011/2012	5	38613.85
2012/2013	6	42645.56
2013/2014	7	46677.27
2014/2015	8	50708.97

Appendix A - 14
SCBNL
The Trend value of Loan and Advances of SCBNL

(Rs. in million)

F/Y	Loan and Advances (y)	x=t- 2006/2007	x^2	Xy	y = a + bx Trend Values
03/04	6693.86	-3	9	-20081.6	6512.91
04/05	8420.86	-2	4	-16841.7	8051.851
05/06	8935.42	-1	1	-8935.42	9590.792
06/07	10502.64	0	0	0	11129.73
07/08	13718.59	1	1	13718.59	12668.67
08/09	13679.8	2	4	27359.6	14207.62
09/10	15956.96	3	9	47870.88	15746.56
	ϕy =77908.13	ϕx=0	ϕx^2=28	ϕxy=43090.35	

or, a = Ey/N = 77908.13/7 or , a = 11129.73
b = Exy/Ex2 = 43090.35/28 or , b = 1538.941

Let the trend line be,

y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (ii)

ϕxy = a ϕx + b ϕ 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| 11129.73+1538.941 | x

For year 2010/2011, y = a + bx| 11129.73+1538.941 | 4

x = 4 y = Rs 17,285.5 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	17285.5
2011/2012	5	18824.44
2012/2013	6	20363.38
2013/2014	7	21902.32
2014/2015	8	23441.26

Appendix A - 15
NABIL
The Trend value of Investment of NABIL

(Rs. in million)

F/Y	Investment (y)	x=t- 2006/2007	x^2	Xy	y = a + bx Trend Values
03/04	5835.95	-3	9	-17507.9	4209.039
04/05	4267.23	-2	4	-8534.46	5643.839
05/06	6178.53	-1	1	-6178.53	7078.639
06/07	8945.31	0	0	0	8513.439
07/08	9939.77	1	1	9939.77	9948.239
08/09	10826.37	2	4	21652.74	11383.04
09/10	13600.91	3	9	40802.73	12817.84
	$\phi y = 59594.07$	$\phi x=0$	$\phi x^2=28$	$\phi xy=40174.4$	

or, a = Ey/N = 59594.07/7 or , a = 8513.439
b = Exy/Ex2 = 40174.4/28 or , b = 1434.8

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| 8513.439+1434.8x

For year 2010/2011, y = a + bx| 8513.439+1434.8 | 4

x = 4 y = Rs. 14,252.64 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	Y (Projected deposit) = a+bx
2010/2011	4	14252.64
2011/2012	5	15687.44
2012/2013	6	17122.24
2013/2014	7	18557.04
2014/2015	8	19991.84

Appendix A - 16
SCBNL
The Trend value of Investment of SCBNL

(Rs. in million)

F/Y	Investment (y)	x=t- 2006/2007	x^2	xy	y = a + bx Trend Values
03/04	11360.33	-3	9	-34081	9392.342
04/05	9702.55	-2	4	-19405.1	11092.09
05/06	12838.55	-1	1	-12838.6	12791.84
06/07	13553.23	0	0	0	14491.59
07/08	13902.81	1	1	13902.81	16191.33
08/09	20236.12	2	4	40472.24	17891.08
09/10	19847.51	3	9	59542.53	19590.83
	ϕy =101441.1	ϕx=0	ϕx^2=28	ϕxy=47592.94	

or, a = Ey/N = 101441.1/7 or , a = 14491.59
b = Exy/Ex2 = 47592.94/28 or , b = 1699.7
48
Let the trend line be,
y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (ii)

ϕxy = a ϕx + b ϕ 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⏐ 14491.59+1699.748Xx

For year 2010/2011, y = a + bx⏐ 14491.59+1699.748⏐4
x = 4 y = Rs.21,290.58 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	21290.58
2011/2012	5	22990.33
2012/2013	6	24690.07
2013/2014	7	26389.82
2014/2015	8	28089.57

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

(Rs. in million)

F/Y	Net profit (y)	x=t-2006/2007	x^2	xy	y = a + bx Trend Values
03/04	455.32	-3	9	-1365.96	401.4507
04/05	519.00	-2	4	-1038	515.2643
05/06	635.26	-1	1	-635.26	629.0779
06/07	673.96	0	0	0	742.8914
07/08	746.5	1	1	746.5	856.705
08/09	1031.1	2	4	2062.2	970.5186
09/10	1139.1	3	9	3417.3	1084.332
	ϕy =5200.24	ϕx=0	ϕx^2=28	ϕxy=3186.78	

or, a = $\phi y/N$ = 5200.24/7 or , a = 742.8914
b = $\phi xy/\phi x^2$ = 3186.78/28 or , b = 113.8136

Let the trend line be,

y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (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⏐ 742.8914+113.8136X

For year 2010/2011, y = a + bx⏐ 742.8914+113.8136⏐4

x = 4 y = Rs.1,198.146 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	1198.146
2011/2012	5	1311.959
2012/2013	6	1425.773
2013/2014	7	1539.586
2014/2015	8	1653.4

Appendix A - 18
SCBNL
The Trend value of Net Profit of SCBNL

(Rs. in million)

F/Y	Net profit (y)	x=t- 2006/2007	x^2	Xy	y = a + bx Trend Values
03/04	537.80	-3	9	-1613.4	467.8843
04/05	539.20	-2	4	-1078.4	567.0343
05/06	658.76	-1	1	-658.76	666.1843
06/07	691.67	0	0	0	765.3343
07/08	818.93	1	1	818.93	864.4843
08/09	1025.11	2	4	2050.22	963.6343
09/10	1085.87	3	9	3257.61	1062.784
	ϕy =5357.34	ϕx=0	ϕx^2=28	ϕxy=2776.2	

Or a = $\phi y/N$ = 5357.34/7 or , a = 765.3343
b = $\phi xy/\phi x2$ = 2776.2/28 or , b = 99.15

Let the trend line be,

y = a + bx ..... (i)

The two normal equation are

ϕ y = na + b ϕx ..... (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⏐ 765.3343+99.15X

For year 2010/2011, y = a + bx⏐ 765.3343+99.15⏐4
x = 4 y = Rs 1,161.934 million

Other trend values have been calculated accordingly.

(Rs. in million)

Year (t)	x = t – 2006/2007	y (Projected deposit) = a+bx
2010/2011	4	1161.934
201/2012	5	1261.084
2012/2013	6	1360.234
2013/2014	7	1459.384
2014/2015	8	1558.534