CHAPTER –I
INTRODUCTION

1.1 General Background
1.1.1 Meaning and Origin of the Bank

A bank is an institution that deals with money by accepting various types of deposit, disbursing loan and rendering other financial services broadly speaking, dank draws money from the people who are not using it at time and lend to those who are in position to use it for productive purposes. Since banks are rendering a wide range of services to the people from different walk of life, they have become an essential part of modern society. In other words, bank is an institution that accepts the deposits from people and in turn advance loan by creating credit. In this process, they earn interest and commission, out of which they pay interest to the depositors i.e. people who deposits fund with them. Bank has opened their branches in towns and villages offering different types of services to the different level of people.

Bank is also defined as an institution for keeping, lending and exchanging of money. Banks debt usually referred as 'Bank Deposit' that is commonly accepted in final settlement of debt of other people. It is different from other financial institution in the sense that they cannot create credit though they may be accepting deposits and making advances. Thus bank's business was basically to buy and sell of credit. Credit instruments are kept on stock in trade also on the basis of its own credit and banks create money transferred by credit instruments. They must gain the confidence and trust of the people to created credits. It is said that the flow of credit is very much important like the circulation of blood in human life. If the circulation of blood is not smooth it will do irreparable harm to the body. Similarly, unsteady and unevenly flow of credit harms the economy.

Bank came in existence mainly with the objectives of collecting the idle funds, mobilizing them into productive sectors and causing an overall economic development. That mobilized deposits contribute to the development of economic infrastructure of the nation. Banks are not just storehouse of the wealth but reservoir of resources. The contribution of the bank has been very substantial in increasing production and employment by motivating people to save and in collecting the scattered saving in the form of deposits. The bankers have the responsibility of safeguarding the interest of the depositors, the shareholders and the society they are serving.

The definitions of banking quoted by Dahal, Sarita and Bhuwan (2002:07) are as follows.
- ➤ A bank is an organization whose principal operations are concerned with accumulation of the temporarily idle money of the general public for the purpose of advancing to other for expenditure.
- ➤ Banking means the accepting for the purpose of lending or investment of deposit of money from the public repayable on demand or otherwise, and withdrawal by Cheque, draft or otherwise.

> Any institution offering deposits subject to withdrawal on demand and making loan of commercial or business nature is a bank.

Above definitions are applicable to all types of financial intermediaries. In fact 'Banks' now a days, do a large number of financial transactions while 'Financial institutions' are authorized to do limit transaction only. Hence, a bank can be defined as a "financial department store" which renders a host of financial services besides taking deposits and giving loans (Sarita & Bhuwan 2002:02).

The present day bankers have three ancestors: Merchant, Moneylenders and Goldsmith. A modern bank is something of each of there. It is said money has two properties. It is flat so it can pile up and it is round so that it can circulate. The progeny of the moneylender concern flat money piled up money and savings. The progeny of goldsmith are concern with round money cash. Modern banks have been developed from very beginning. The earlier bankers were merchants, goldsmith and money lender.

History tells us that it was the merchant banker who first evolved the system of banking by trading in community then money. Their trading activities required the remittance of money from one place to another.

Next stage in the growth of banking was goldsmith such that he had to take deposit such as billion, money and amendments for security from theft. This makes possible the goldsmith to change something case of money and bullion. On the other hand, as the evidence of securing valuable, he used to issue a receipt to the depositors as such receipts are used for payments equivalent to mention. It became like a modern cheque as a medium of exchange and means of payments.

Finally, moneylender in the early age contributed in the growth of banking to large extent. He advances the coins on loan by charging interest. As safeguard he used to keep some money in the reserve. Therefore, moneylender became banker who started performing the two functions of modern banking i.e. accepting deposits and advancing loans.

There are various concepts among the economist about the origin of the word 'Banking'. The term **Bank** derived from the Latin word – **'Bancus'** that refers to the bench on which the banker would keep its money and his record. Some people trace its origin to the Italian word – **'Banca'** and the French word – **'Banque'** that means a bench for keeping and exchanging of money in the market.

Moneylenders in the streets of major cities of Europe used bench for acceptance and payment of valuable and coins. When they are unable to meet their liabilities the depositors used to break their bench. The term – **Bankruptcy** is derived thereof. It is difficult to say exactly whether the term **'Bank'** has been derived from **'Bancus'** or German word **'Bank'** that means Joint Stock Company.

Despite the strong criticism by the church on charging interest, modern banking sowed its seed in the medieval Italy. **Bank of Venice** was the first established in 1157 AD in Venice. Italy is regarded as the motherland of first modern bank. The **Bank of Barcelona** and Bank of Geneva were established in 1401 and 1407 respectively. **Bank of Amsterdam** set up in 1609 was very popular. These modern banks gradually replaced goldsmith and moneylender in Europe. The **Bank of Hindustan** established in 1770 is regarded as the first bank in India. Though, Bank of England was established in 1694, the growth of banks accelerated only after the introduction of banking act 1833 in United Kingdom as it allowed opening Joint Stock Company.

1.1.2 Origin and growth of banking system in Nepal

Like other countries, Goldsmith, Merchant and Moneylender were the ancient bankers in Nepal. In respect to the evolution of banking system in Nepal, which is derived on the ground of historical facts that existed during the Lichhabi period, King Gunkamdev, had borrowed money from the rich people to build the city? The historical record shows that Gunakamdev, the king of Kathmandu burrowed money to rebuild his kingdom in 723 AD. Some fifty-seven years thereafter, a merchant 'Shankhadhar' introduced 'Nepal Sambat' by clearing all the debtedness of the people in 880 AD. This clearly proved that money-lending practices were prevalent at that time.

Later, during the regime of Mallas, money-lending business became more penetrating and popular. Towards the end of the 14th century, Jayasthiti Malla, the ruler of Kathmandu,divided the people in sixty four classes on the basis of their occupations. Among them one was Tankadhari and the people belonging to this class were engaged in money lending business. It is believed that money lending business became quite popular in the reign of Mallas, particularly in financing the trade with Tibet and India. Thus, the role of Tankadhari was akin to that of banking agent. However, these money lenders advanced loan against personal security of land, building etc. as they were free to charge any amount as interest and other charges on the loan advances. Naturally, the interest rate was higher, discriminatory and unfair. Of course, this gave birth to malpractices, frauds and exploitation in the whole Nepalese society. Even today, such practices of usury are prevalent in Nepalese village, which are beyond the purview of modern banking system.

Thus, it was duty of the government to control the malpractice of the moneylenders and to set up financial institution to make easy credit facility for the general people. As a result, with growing consciousness awareness of this, "Tejarath Adda" has been established as an institution, during the period of Rana, under the prime minister ship of Ranodip Singh in 1933 B.S. It was established for simple banking operation. It has carried the function of providing loan for the government servants and to the general people under the collateral of gold and silver at the low interest rate. Tejarath Adda did not collect deposit from the public but gave loan to employees, who had been prime minister for 8 years (1877-1885 Ad), was not interested in the problem and took concrete steps by establishing a government financial institution known as k'Tejarath'.

Tejarath helped the public by supplying easy and cheap credit at 5 percent interest on the security of gold and silver ornaments (Ojha & Rajbahak, 1968:08).

In the overall development of banking system in Nepal, Tejarath Adda could be considered as the father of modern banking institution. It had rendered good services to the government servants as well as the general public for long time. This institution adapted one of the elementary functions of granting loans against gold, silver and other collateral, which is more or less similar to the modern banking system. Although, credit facilities of Tejarath were extended to some other sectors during the Rana Primeministership of Chandra Shamsher (1901-1929 AD), it could not meet the credit needs of the entire society. It was the government institution, which basically benefited the government officials. And the general public still had to depend chiefly on the local moneylenders. They used to charge high rate of interest on loans, manipulate the account and purchased the standing crops at a very nominal price and so on.

In such complex and critical situation, it had become apparent to the government to take some necessary steps in this regard. To make the poverty-ridden rural people free from the clutches of moneylenders and to develop the trade and industry in the country, the need of commercial bank with the modern banking facilities, was seriously felt by the government. In other word, a commercial bank was required for the sake of the economic expansion of the country.

After then, another financial institution was established in 1991 BS as a named of 'Sainik Drabya Koshs' especially for the future welfare of government staffs. Before commencement of 'Sainik Drabya Kosha' the government staff of that period had to face much more economic difficulties after the retirement from the office (Shakya 2040:40)

The council of industry was organized in 1993 BS for the development of trade and industry, which was eventually by a corporate sector commercial bank- Nepal Bank Limited (NBL) in the joint effort of numbers of individual and the government. The Tejarath was replaced by Nepal Bank Limited, which market the beginning of new era in the history of modern banking in Nepal.

Modern banking started with the inception of NBL under the Nepal Bank Act 1936AD (in BS 1994-07-30). NBL had Herculean responsibilities of attracting people towards the banking system from pre-dominated moneylenders and to expand banking services. Bing a first commercial Bank it was nature that NBL paid more attention to profit generating business and opened branches at urban centers.

NBL was established with 49% government share and 51% share of general public. However private shareholders controlled NBL till 1951 and it was only in 1952 that HMG increases its share ownership in NBL to 51% in order to hold control over its management. The bank was one of the major ventures to be floated under the venture company principle with an authorize capital of Rs.10 million: one forth of which was issued at once. It was established to solve the

prevailing financial inconvenience of the people, to uplift the economic development of country by institutionalizing trade and commerce and by assisting other development activities.

Till the foundation of Nepal Rastra Bank (NRB), NBL remained the only one financial institution of the country with the growing realization about the coordination and promotion of banking activities in the country. The establishment of central bank had become immensely an urgent task. The government however, has onus of stretching banking services to the nook of country and also managing financial system in the proper way. Thus, Nepal Rastra Bank (NRB) was set up on BS 2012-01-14 as a central bank with an authorized capital of RS.10 million fully subscribed by the HMG under Nepal Rastra Bank Act 2012 BS. NRB was credited for the purpose of issuing notes, bringing stability in the exchange of Nepalese currency. Similarly, carrying out transaction of Nepalese currency over the kingdom and encouraging industries after making the capital dynamic for the development of the country, prior to emergence of NRB the note issuing authority was vested with the 'MULUKIKHANA' the government treasurer officer. Since then, it has been functioning as government's bank and has contributed to the growth of financial sector. The major challenge before NRB today is to ensure the robust health of financial institution. According, NRB has been trying to change them and has introduced a host of prudential measure of safeguard to interest of public. NRB is yet to do a lot to prove them an efficient supervision. NRB really requires strengthening their policymaking, supervision and inspection mechanism (Sarita & Bhuwan, 2002:11)

The preamble of NRB Act lays down the aims of the banks as being of that of regulating the issue of paper money, securing country-wide circulating of Nepalese currency and achieving stability in its exchange rate; mobilizing capital for economic development and for stimulating trade and industry and developing the banking system in the country; and later on an incorporated by the amendment in 1964, ensuring facilities and maintaining economic interest of the general people.

The foundation of NRB set a milestone in the history of banking in Nepal. After this, novel way of thinking and a new sort of spirit arose in the field of banking. A suitable, specialization and scientific banking institution was felt necessary. By 2013 BS (1957 AD), Nepal Industrial Development Centre (NIDC) was established with an authorized capital of Rs.20 million as a financial institution. NIDC has made a great contribution for the development of financial institution in Nepal. In 2016 (1959), it was converted to Nepal Industrial Development Corporation (NIDC). Since its establishment in 1959, NIDC has been playing a significant role in industrialization of Nepal by providing technical and financial assistance for the establishment, expansion and modernization of the industrial projects in the private sector. The basic objective of NIDC is to assist and encourage private enterprise by providing financial resources and technical guidance.

Integrated and speedy development of the country is possible only when competitive banking services reaches nooks and corner of the country. Keeping this in mind, the government set up Rastriya Banijya Bank (RBB) in BS 2022-10-10 as a fully government owned commercial bank

(Sarita & Bhuwan, 2002:11). In the view of providing facilities to the general people and to manage for economic aids, it was identified with sole ownership of the government with the authorized capital of Rs.10 million and paid up capital of Rs.3 million. Its objectives were confined to facilitate economic aids for the general public to provide loan for industry, trade and commerce and to supply banking services to the people properly.

In the development of financial institution, Agriculture Development Bank (ADB/N) was another significant achievement. It was set up in 2024-10-07 (1967 AD) with an authorized capital of Rs.50 million to provide finance for agricultural products so that introducing modern agricultural techniques could enhance agricultural products. Its functions are to provide loans for development of agriculture sectors, personal and agriculture enterprise for the purpose of economic development of the country to work as a commercial bank and to distribute loan for the execution of several programs.

No foreign banks were opened in the country before 1974. There were no provisions made in the Commercial Bank Act for the entry of foreign bank into the financial system of Nepal up to 1974. Commercial Bank Act 1974 has however, made provisions to permit foreign banks to operate in the country by obtaining the approval of NRB. The creation of efficient monetary arrangement and reformation of the financial of the country could make an important contribution to mobilize more domestic resources to finance and implement the policy of economic acceleration of the country.

Therefore, the three, most dramatic and far-reaching, financial reforms programs were carried out in 1980. They were allowing the foreign banks to operate as joint venture, lifting the control on interest rate and introducing the Government's action on securities.

With the aim to provide quality banking services, enhance efficiency and healthy competition. Foreign investment & new technology in banking sectors was introduced. Following the liberalization path for the foreign banks, three joint ventures banks were initiated with a view to encourage efficient banking services, which is the pre-condition for the economics development, industrialization and growth of the country in 1980s. However, excess political and bureaucratic interference and absence of modern managerial concept was hurdled in the operation of institutions as conceived of banking service to the satisfaction of customer was a far cry.

Nepal Arab Bank Limited, currently known as NABIL was established as the first Joint Venture Bank in the 12th july 1984. It has proved to be a milestone in the history of modern banking in Nepal. Nabil bank gave a new ray of hope to the sluggish financial sectors (Sarita & Bhuwan, 2002:12). It was established under the company Act 1965 and executed in accordance with Commercial Bank Act 1974. Dubai Bank Limited (DBL) was the initial foreign partner with 50% equity investment. Later on, the shares owned by DBL were transferred to Emirates Bank International Limited (EBIL) in accordance with the joint venture and technical services agreement between Nepalese promoters and DBL. NABIL has Rs.130 million authorized capital.

Similarly, Nepal Indosuze Bank Limited, currently known as Nepal Investment Bank was established as second joint venture in BS 2042-11-16 (1986 AD) with a view to encourage efficient banking services and facilities. It was a joint venture between Nepalese & French partners. The French partners, Credit Agricole Indosuze, a subsidiary of one of the largest banking group in the world, had hold 50% of the capital of NIBL. The Nepalese partners of the NIBL were RBB with 15% share, Rastriya Beema Sansthan with 15% and 20% share of general public. It had an authorized capital of Rs.120 million and paid up capital of Rs.60 million.

Nepal Grindlays Bank Limited was established as third joint venture bank, venture with Grindlays Bank P.L.C London in 30th January 1987. The bank has been operated with authorized capital of Rs.200 million and paid up capital of Rs.100 million and been formed under joint venture principal capitalizing on behalf of foreign and domestic nation. The 50% investment was of Grindlays bank of London, NBL constitutes 35% of its share and 15% share of general public. It had been executed under the direction of Australia and New Zealand Banking Group (ANZG). Now, this group has been taken over by Standard Charted Group at international level. It was renamed as Standard Charter Bank Nepal Limited on 13th July 2001.

With a novel zeal and confidence to compete, Himalayan Bank Limited (HBL) emerged among the Nepalese people. HBL, a joint venture bank Habib Bank of Pakistan, was established in 1992 under the company act 1964. This is the first joint venture bank managed by Nepalese chief executive. The operation of bank started from 1993 February. The main objectives of bank are to provide modern banking facilities like Tele-Banking to the businessman, industrial sectors. Promoter's holds 51% share, Habib Bank Limited of Pakistan has 20% share, 14% share of employees. Provident fund and Nepalese citizen investment fund has 15% share. The bank has authorized capital of Rs.240 million and paid up capital of Rs.120 million.

HBL was following immediately by another venture bank. Nepal SBI Bank Limited was established under joint venture with state bank promoters under the Company Act 1964 in 8th July 1993. State Bank of India manages the bank under the joint venture a technical services agreement signed between it and Nepal promoter's viz. Employees Provident Fund and Agriculture Development Bank Nepal. The State Bank of India has 50% shares. The main objective of the bank is to carry out modern banking business in the country under the Commercial Bank Act 1974. The bank provides loan to agriculture, commerce and industrial sector. It has authorized capital of Rs.240 million and Rs.80 million paid up capital.

Later on, Nepal Bangladesh Bank Limited (NBBL) came into the horizon of the Nepalese banking areas. It was inaugurated on July 6, 1994. International Financial Investment and Commerce Bank Ltd **(IFIC)** of Bangladesh and Nepalese promoters jointly made investment of the bank. IFIC has 50% share, Nepalese promoters has 20% share and 30% share of general public. NBB has authorized capital of Rs.240 million and Rs.60 million paid up capital.

Immediately, after the operation of NBB, Everest Bank Limited (EBL) was started its banking operation in October 1994 as per the Commercial Bank Act 1974. The bank has jointly financed by United Bank of India and Nepalese promoters. United Bank of India has 20% share, Nepalese promoters have 50% share and 30% of general public. It has authorized capital of Rs.240 million and Rs.60 million paid up capital.

After EBL, another joint venture bank, Bank of Kathmandu Limited (BOK) has started its banking operation from March 13, 1995. Siam Commercial Bank Thailand has financed BOK. Siam Commercial Bank of Thailand has 30% share, promoters has 45% share and 25% share of general public. Its authorized capital was Rs.240 million. When Siam Commercial Bank divested its full capital in 1988 and its ownership handed over to the Nepalese Management (for details see introduction of Sampled Banks).

Nepal Sri Lanka Merchant Bank Limited has started its operation since February 4, 1996 as the first Merchant Bank in Nepal. Merchant Bank of Sri Lanka has financed it. The Merchant Bank of Sri Lanka has 50% share, promoters have 25% share and 25% share of general public. It has authorized capital of Rs.120 million and paid up capital of Rs.30 million.

Nepal Bank of Ceylon Limited was established as a commercial bank on BS Aswin 28. After withdrawal of the investment by Sri Lanka Merchant Bank, the bank come up with new management and renamed as Nepal Credit and Commerce Bank Limited since 2002, Sept 10. The equity share structure of bank comprised 30% share of general public, 1% of NBB, 8.2% of Nepal Insurance Company and 60.8% of the Nepalese investors.

Lumbini Bank Limited (LuBL) was set up on 2055 Shrawan 1. General public (30%), employees provident fund (14%), Citizen Investment Trust (6%), Lalitpur Finance (7%), NEFINSCO (2%) and Nepalese investors (4%) have financed LuBL.

Nepal Industrial and Commercial Bank Limited (NIC) was set up on BS 2055-04-05 with 30% share to general public, 5% share to RBB and 65% share to the Nepalese investors.

Similarly, Kumari Bank Limited (KBL) was set up on BS 2056-08-24 with 30% share to general public and 70% shares to Nepalese promoters. It has started its operation from BS 2057-12-11 with an objective of providing competitive and modern banking services in the Nepalese financial market (for details see an introduction of Sample Banks).

Another Commercial Bank, Laxmi Bank Limited (LaBL) was established on BS 2058-06-11. Its total capital composition has 35% share to general public and 10% to Citizen Investment Trust and remaining 55% to Nepalese promoters. It has started its operation on BS 2057-12-21.

Siddarth Bank Limited was set up on BS 2058-06-01 as seventeenth Commercial Bank. It has commenced the transaction from 2059-09-09. Its capital structure has 40% from the general public and 60% from the Nepalese promoters.

Before written this report other three banks has also established on the nature of commercial view, Global Bank, Citizen Bank and Sunrise Bank. They are also started its operation before 2065.

As a consequence of financial sectors reform, there are 20 commercial banks operating in Nepal including 2 public sector banks. Besides there are 24 Development banks, 5 Rural Development Banks, 59 Financial Companies, 21 Licensed cooperative societies and 45 Licenses Micro Finance Non Government Organization out of total deposits of banks and financial institution amount to Rs.252 billion in mid July 2003, commercial banks had dominant role in loans and advances as their share stands at 72% out of total credit outstanding of banks and financial institution amounting to Rs.174 billion in the same period (Gorkhapatra: Nov 11, 2004).

1.1.3 Nature of Commercial Banks

Commercial banks are those that accept deposit and finance to the business and finance to the business and project. They provide short term and long term finance.

As per Commercial Bank Act 2031 BS, "*A Commercial Bank means the bank which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions."*

In the beginning commercial bank's functions were confined to accepting deposits and giving loans but now it increase manifold. Commercial Banks are found operating throughout the world. Bank of Venice set up in 1157, is the first commercial bank in Nepal. Major functions of commercial banks are: accepting various types of deposits, lending money in various productive sectors, Guarantee (G'tee) Remittance, Bills and others.

Notwithstanding the functions of commercial banks have multiplied through time and a modern commercial bank trifles with providing many ancillary services to its customers, providing lockers to customers, advising its clients on tax matters acting as trustee of minors estate etc. which its ancestral counter part never even dared to think of performing its major function still consists of accepting the deposits from public and lending those pooled deposits to the needy member of society mostly against the security of collateral.

The term commercial bank lacks accurate description despite its long usages. It is inappropriate because it fails to describe accurately the scope of commercial banks lending activities at present time originally the term was applied because it was widely believed that a commercial loan i.e. commercial bank loans should be for a duration of less than one year, should be given only to traders and merchants to enable them to finance the transportation of goods in domestic and foreign trade and to finance the holding of trade inventories for short period required for their sale. It was also believed that besides providing short term financing of trade, commercial bank could also give short term loan to agriculturists for meeting production expenses and marketing their crops (Vanish, 1978:04).

With the development of industries this principal gradually changed and the commercial bank's lending activities was extended to incorporated short term lending to producer for financing of inventories, wages and other needs for circulating capital. Commercial banks, at present are biggest providers of short term loans to commerce, industry and agriculture in economy. But apart from providing short-term loan, they finance to trade, industries and agriculture. Commercial banks today hold a wide variety of earning assets.

Today commercial banks not only issue and transfer deposits through cheque but they also operate saving deposit accounts act as underwriters to new equity issues deal in foreign exchange, provide locker facilities and handle tax matters on behalf of clients.

1.1.4 Role of Commercial Banks in the National Economy

Every country of the world, developed or underdeveloped, is in pursuit of attaining the goal of rapid economic development in the same way or other depending upon the prevailing prospects and nature of instruments for economic growth. Commercial Banks play the role of financial intermediary collecting the fund from surplus unit and supplying the to deficit units (investors). The structure of modern economy will be no better than ancient period of barter system without financial intermediaries. Therefore, commercial banks play an important role in development of national economy.

Commercial banks play vital role in the affairs of the economy in various ways. Their operations record the economic pulse of the economy. The size composition of their transaction is a mirror of the economic happenings in the country. For example the mass failures of commercial banks during the 1930s reflected the phenomenon of serve global economic depression over the world. They have played an important role in giving a direction to economic development over time by financing the requirements of trade and industry in the country. In the context of deposit mobilization, given the savings income ratio, commercial banks induce the savers to hold their savings in the form of socially useful assets of which bank deposits constitute the most important element. They craw the community saving into the organized sector, which can be allocated among the different economic activities according to priorities lay down by planning authorities in the nation. Banks bring together the decision of the income earlier together the decision of the savers to save, the decision of the savers to hold their saving as bank deposit and the decision of the producers to draw upon the saving of the community for the purpose of capital assets formation.

Commercial banks help the process of saving and the holding of saving in a socially described form. Though their advances bank also help the creation of the incomes which further saving by the community and further growth potentials emerge for the good of economy. In a planned economy, bank emerges for the good economy and makes the entire planned productive process possible by providing funds for all types of production incorporated in the plan, regardless of whether the production is in the public sector or whether the production is undertaken by one

type of organization or another. All employment income distribution and other objectives of plan are as possible subsumed into production plan which banks finance (Vaish, 1978:6-7)

The importance of commercial banks is directing the economic activities in the system is indeed overwhelming with the establishment of commercial banks the flood gates of development promising great hopes for people in the life open.

However, poor economy may be there will be needed for institution, which allows such saving as are currently forthcoming to be invested conveniently and safely and which ensure that they are channeled into the most useful purpose (Vaish, 1978:75). Therefore, the tasks of commercial banks in underdeveloped countries are almost self-evident. Their purpose is to provide a collecting point for saving of a relatively small average amount from a larger number of individual sources so long as the means to utilize saving safely and profitably are not available within an economy, funds will either t be directed abroad, sterilized in useless hoards of cash or precious metals or more likely still will not accumulated all.

1.2. An Introduction of Sample Bank

Bank of Kathmandu Limited (BOK) is taken as sample of study out of 20 commercial banks. This bank was formerly established with the motive of commercial nature. It is fully managed and owned by Nepalese entrepreneurs.

1.2.1 Bank of Kathmandu Limited

Bank of Kathmandu Limited incorporated in 1993, and came into operation in March 1995 as a modern commercial bank with joint investment of Siam Commercial Bank of Thailand. Its authorized capital was 24 crores in which 50% share capital was investment by Nepalese entrepreneurs, 30% share capital was invested by Siam Commercial Bank & remaining 20% to general public. When Siam Commercial Bank divested its full capital and its ownership is handed over to the Nepalese management team.

Financial Institution holding 2.07% of the capital (i.e. 96,173)
Organized Companies holding 0.23% of the capital (i.e. 10,794)
The remaining 97.69% being held by the General Public (i.e. 4,528,842)

Its share capital distribution is as follows
Authorized Capital (1000000 shares @Rs.100) Rs.100000000
Issued Capital (5000000 shares @Rs.100) Rs.500000000
Paid up Capital (4635809 shares @Rs.100) Rs.463580900

Regarding the share withdrawal by Siam Commercial Bank of Thailand, Radesh Pant, MD of BOK said, "Asian crisis of 1997 was the prime reason that forced them to exit from Nepal.

Secondly, it was the mismatched between their management style and real business need of Nepal".

After departure of Siam Commercial Bank in 1998, the management of this bank is focused on business development and image enhancement. BOK is able to make progress in both fronts since two years the bank's main objectives are consolidation of business, diversification in both credit & deposit portfolios and institutionalization of service.

Currently BOK has succeeded in centralization operations, establishing procedures, policies and system. It is also able to maintain manageable and sustainable growth in business. All the branches/outlets are completely connected and networked via satellite. Major business focus of BOK is on the middle class people. To appeal the middle class family BOK introduced retail loans and Sajilo Bachat Khata in which a customer can open an account with only Rs.1000 Recently, BOK have introduced any time, Anywhere Debit ATM and point of sales. To manage costs effectively and efficiently BOK have introduced of "Multitasking in human resources by whom the bank currently able to manage growing business with lay off of 30 staff".

BOK is focusing on bottom up management approach that means it is adopted decentralization decision making. The different departments are independent to take decision on the matter concerning their respective job portfolios. If any decision is required to be taken by top management, the process is initiated through particulars department. It is truing to foster team approach by which ownership, commitment and dedication is encouraged. The management teams of BOK believe in long term sustainability of institution. Thereby, their focus is on strengthening internal system, process and producers. They have long term strategic plan in place and short term operations are driven by annual plans and forecasts. They have cost management strategy in place and have emphasized on remittance retail handling, small-scale deposits and other new areas.

Bank of Kathmandu has 11 branches & more than 200 employees. BOK has the following predominant objectives:
- ➢ Identify business prospects not yet catered by than existing commercial banks and offer new banking products and services.
- ➢ Introduce modern banking technology facilitating bank and business operations and transactions.
- ➢ BOK's activities global around deposits mobilization, advancement of various credits, international banking including trade financing, inward outward remittances and funds and portfolio management.

Bank of Kathmandu is committed to providing products and services of highest standards to its customers by understanding their requirements best suiting the market needs. In pursuit to deliver the products and services of the highest standards, Bank of Kathmandu has state-of-art technology for appropriate and efficient Management Information System (MIS)and rendering quality services, VAST and Radio Modern for networking, SWIFT for International trade and

transfer of funds around the world, correspondent banking relationships with over 200 banks worldwide for effective and proficient execution of international trade and remittance activities, gamut of corporate and retail banking products and services and centralized banking operations for better risk management, consistent service deliveries and lowering operating cost.

1.3 Statement of the Problem

Joint venture banks and Nepalese promoter's bank are being increased in response to the economic liberalization policies of government. Besides joint venture banks, Nepalese promoters are also registering numbers of commercial banks. Other institutes offering similar services are finance company, saving & co-operative societies and development banks.

These institutions have the tendency to centralize in major cities focusing the activities among the industrialists, traders & entrepreneurs. Because of number of banks & financial institutions are come into existence, in the recent years that creates intense competition in the banking sectors. Banks have been facing the considerable pressure to lower the lending rates, which has been adversely affecting the profitability of banks. The commercial banks are completing with limited opportunity, narrow clientele base and barring investment in the economic activities in the country, the demand for credit has not picked up. Besides, competition in the banking sectors has turned intense and lending opportunity in the good projects is very limited.

Government policies on economic liberalization have further intensified the competition. Every bank shows their huge amount of profit & high technology; however, the profit is not the instrument to measure good health of that institution. There should also be the proper examination of their performance in term of overall management of the banks. Financial plans may not take forms, but any good plan must be related to the firm exciting strength and weakness. The strength must be understood if they are to be used to proper advantage & the weakness must be recognized if effective action is to be taken.

There are altogether 17 commercial banks among them two banks are state owned and remaining 15 are in private sectors. We can sub divide the 15 banks on the basis of investment & ownership. For example, NABIL, SCBNL, HBL, NSBL, and EBL are with foreign joint venture bank and NBIL, BOK, KBL, MBL, NCC, NIC, LuBL, LaBL & SBL are such types of joint stock commercial banks whose shares are owned by Nepalese entrepreneurs & operate under fully Nepalese management team. Similarly, Nepal Investment Bank Limited, Nepal Credit and Commercial Bank & Bank of Kathmandu Limited were formerly managed by foreign nationals but now have come under Nepalese management. Recently three new banks can operated in the country. They had used customer's oriented marketing concepts as well as modern technology as required by the present competitive environments.

The problem of the study on the issues related to the strength and weakness of BOK. Thus researcher is strived to find the answer of the following question:

1. What is the position of BOK in terms of liquidity, profitability, turnover, and leverage and capital adequacy?
2. What is the relationship between loan, deposit and other variables?
3. What is the future trend of BOK?
4. What is all the overall financial status of BOK?

1.4. Objectives of the study

The basic objectives of the research is to make an analysis of financial performance of BOK Ltd, by using financial and statistical tools and to recommend the suitable suggestion for importance of this bank.
The specific objective of this study is as below:
1. To present the existing financial position of BOK.
2. To examine the liquidity, profitability, leverage, efficiency, and capital adequacy position of BOK.
3. To examine the operating profit/loss of BOK.
4. To highlight the relationship between different variables through correlation coefficient.
5. To calculate the trend of financial performance.
6. To recommend the corrective measure for betterment of financial performance of BOK.

1.5. Significance of the study
The study has multidimensional significance and will be useful to the following take holders:
1. The research would be useful for the investors i.e. shareholders.
2. The research would be useful for the management of the banks.
3. The research would be useful for the policy makers (while formulating the policy regarding commercial banks).
4. The research would be useful for further researcher.
5. The research would be useful for the university student who is undertaking same course.

1.6. Limitation of the study
The study has been conducted for the requirement of master degree in business study and it has been limited in terms of period of study as well as source and nature of data. Thus the limitations of this study are:
1. There are more than 17 commercial banks operating within Nepal. Since the study deals with only one commercial bank name as BOK Ltd. The conclusion drawn from the study may not be applicable for other banks.
2. The study covers the period of five years starting from FY 2061/2062 to FY2065/2066.
3. The whole study is concentrated in financial aspects of BOK Ltd. It doesn't cover the other area of banks.
4. There are many financial and statistical tools used to study the financial performance. But the researcher has used limited tools for this study.

5. The whole study is based on secondary data from the annual report of the Bank of Kathmandu Limited. Similarly, the study focused on B/S and P/L A/C maintained by bank and published in annual reports.
6. The lack of time and resources is another limitation of the study.

1.7 Organization of the study:
   The research study has been divided into five sequential chapters and at the end bibliography & appendices have been maintained.

Chapter I: Introduction
   It includes general background (i.e. meaning and origin and growth of banking system in Nepal, nature of commercial bank, role of Nepalese commercial banks in the national economy), Introduction of BOK Ltd, statement of problem, objectives of the study, significance of study, limitation of study and organization of the study.

Chapter II: Review of Literature
   It consists of conceptual/theoretical framework, review of different articles, and review by master's thesis.

Chapter III: Research Methodology
   It deals with research design, population and sample, nature and source of data's, data processing procedure, tools and techniques for analysis, period covered and diagram and graphical presentation.

Chapter IV: Presentation, Analysis and Interpretation of Data
   This chapter attempts to analysis and evaluate the data with the help of analytical tools i.e. ratio analysis, profit/loss analysis, statistical tools i.e. coefficient of correlation analysis, trend analysis and interpretation of the results obtained.

Chapter V: Summary, Conclusion and Recommendations
   The fifth chapter is the final chapter of the study, which consist of major findings, conclusions and recommendations of the study.

CHAPTER II
REVIEW OF LITERATURE

Review of literature is basically stocktaking of an available literature in the field of research. In other words, review of literature is finding the pertinent fact with the available literature in ones fields of research. The study of the material available on research topics is called review of literature. Review of literature not only provides solid information on the topic but also guides along the future stream of action. The textual constraints would help the researcher to support area of research in order to explore the relevant and true facts for the reporting purpose.

The main purpose of literature survey is found out with studies have been conducted in one's chosen field of study, and what remains to be done. It provide the foundation for developing the comprehension theoretical framework from which hypothesis can be formulating and minimize the risk of pursing dead ends in research with related topic & good idea of the problem. The researchers also can derive knowledge from what has been written concerning his/her topics. The other major purpose of raving the literature is to develop some expertise knowledge in ones area to see what new contribution can be made, and receive some idea for developing a research design.

This chapter is organized into three headings; conceptual framework, review of related articles and review of different masters' theses.

2.1. Conceptual Framework (*Review of Books)*

2.1.1 Concept of Financial Performance Analysis

Financial performance analysis can be considered as a heart of financial decision. This growth and development of any enterprises is directly influenced by the financial policies. The finance is interrelated to such field as accounting, social science, economics and allied subject. The accountant prepare the statement and gather the data, which are useful for financial manager to make financial decision, good financial decision always plays vital role about the profit of enterprises. Similarly, it is equally important to achieve the wealth maximization of owners.

Financial performance is a quantitative analysis of the firm's efficiency. In other words, it is away of studying financial position or condition of company. The company's financial plan & policy prepared implemented by the management should judge on the ground of its financial performance. Conceptually the vocabulary "Financial performance" concerns with the management and analysis of financial operation of the firm though the means of profitability, liquidity, efficiency and utility of resources.

Traditional financial ratio analysis has focus on the number. The value of this approach is that quantitative relation can be used to diagnose strength and weakness is a firm's performance. But the world is becoming more dynamic & subject to rapid change. It is not enough to analyze operation performance. Financial analysis must also include consideration of strategic and economic development to which the firm must relate for its long-term success. In addition to the

categories of stockholder must be bordered formally ratio analysis was performed from the point of view of the firm's owners and creditors in the present political & social environment the shareholders must be expanded to include employees, customers, social environment consideration and other government regulatory interest (Weston & Copland, 1992:191).

Financial analysis involves the use of various financial statements- the first is the balance sheet, which represents a snapshot of the firm's financial position at a moment in time and next is the income statement that depicts a summary of the firm's profitability over time (Vanhorn & Wachowicz, 1997:120).

It is possible of identifying the financial strengths and weakness of the firm by properly establishing relationships between the items of the balance sheet and profit and loss account (Pandey, 1994:096).

It is also the analytical and judgmental process that helps answer questions that have been posed. Therefore, it is means to end, apart from the specific analytical answers, the solutions to financial problems and issues and on the nature and reliability of the information available (Helfert, 1992:02).

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

The analysis makes an attempt to dissect the financial statements into their components on the basis of the purpose on one hand and between individual components and total of these items on the other. In course of studying and evaluating the financial position of the organization, a study of trends of various important factors over the past several years is also undertaken to have clear understanding of changing profitability and financial condition of the business organization (Srivastav, 1993:56)

Financial statement analysis involves a comparison of a firm's performance with that of other firm's in the same line of business, which is often, identified by the firm's industry classification (Weston, Besley & Brigham 1996:78)

With respect to the problems identified from the analysis, pertinent care should be made to distinguish between the cause and symptom of problem (Hampton, 1998:99).

The analysis of transactions determines the solvency of business and the measure of efficiency of operations as compared to similar concerns. The analysis reveals how far the dream and ambition of top management have been converted into reality during each financial year. The

analysis, being a technique of x-raying the financial position as well as progress of a concern, it enables managers and investors take decision that will affect the company's future.

Financial performance as a part of financial management is the main indicator of the success or failure of enterprises. Stockholders such as owners, managers, creditors, employees, customers, tax authorities etc are directly concerned/interested in financial information and analysis of enterprise position. Similarly financial analysis, trade unions, competitors etc are directly interested about the financial performance of enterprises. Though the type of analysis is very according to specific interest about the financial performance of enterprises & the part involved, shareholders of the enterprises are concerned with the present and expected future earning as well as their variations with the earning of other enterprises. This shows that they concentrate their analysis on the profitability of the enterprises. Management of enterprises is interested in all aspect of financial control of the enterprise. Trade creditors are primarily interested in liquidity position of the enterprise to pay their claims. Long-term creditors are more interested in cash flow ability of the enterprise to service debt over long run. Thus, financial analysis is the process of identifying the financial strength and weakness of the enterprise by properly establishing the relationship between the items of balance sheet and profit and loss account. In sum, it is process of evaluating the relationship between component part of financial statement to obtain better understanding of an enterprise position and performance.

The profit earned by the company is main yard of valuing the financial performance. Over the long term adequate and reasonable earnings are essential are assure survival and growth to capital adequacy through profit retention, to assess market for both debt and equity and to provide funds for increased assistance to productive sectors (Needles, 1989). A company grades itself as successful company, if it generates maximum profit to justify fair rate of return on investment. Thus the company should manage its available financial resources effectively in the productively are so that profitability position of the company rise and profit margin and return on investment boost up.

A large percentage of banks fund consists of deposit on different terms, payable according to the contractual obligation with the depositors. If all funds available with the bank are fully lent, there will be an inevitable delay in recovering the money when required by the depositors. The consequent delay on the part of the bank, even if it may be small at time, will affect its credit, as by the every nature of its business, its obligations have to be met promptly. The capacity of the bank to attract and retain deposit depends largely upon the confidence it enjoys with the public. Such confidence in its turn depends upon the readiness with which deposits are repaid whenever they full due. It is ultimately the prudent manner in which the funds are employed by bank in different forms that determine their quick reliability and enhances its reputation. It on the other hands, the bank keep large portion of funds at his disposal in ready cash or with central banking authority, without earning any interest, its business will result in losses. The manner in which these two apparently conflicting principle of liquidity and profitability are happily reconciled to the maximum benefit, calls for sound judgment and business acumen in the part of bank, which come only after considerable experience.

A commercial bank is essentially a lender in money. It is a banking institution, which accepts the demand and time deposits from business, institutions and individual and engages in both business and consumer lending. A commercial bank, however, different from money lender who deal in money because, unlike the money lender who deals which belongs to him, the money dealings of commercial banks are largely based on the money it receive from other its deposits. The effect of commercial banks to maximize its total net income by employing its fund productively creates a difficult problem of asset management for commercial banks.

Thus, the financial performance of any commercial bank should be valued in term of profitability, liquidity, efficiency, utilization of resources and profit management. In nutshell, the financial analysis can be defined as the processing the financial condition of firm.

2.1.2 Objectives of Financial Performance Analysis

From the concept of financial performance analysis, it has been evident that one can explore various facts related to the past performance of business and predict out the future potentials for achieving expected results. Various parties are involved in the business directly or indirectly. Therefore, objective of the analysis also differs from one party to other. However, major objectives of analysis, in broad sense, can be stated as (Needles, 1989)

a) Assessment of past performance and current position

Past performance is often good indicator of future performance. Therefore, an investor or creditor is interested in the past sales, expenses, net income, cash flow and return in investment. In addition, an analysis of current position will tell what assets the business owns and what liabilities must be paid. Besides, it will provide the information about various facts in relation to business such as:
  ➢ Earning capacity or the profitability of the concern.
  ➢ Operational efficiency of the concern as a whole and of its various departments.
  ➢ Long term and short term solvency of the business for the benefit of debenture holders and trade creditors.
  ➢ Real meaning and significance of financial data.

b) Assessment of potential and related risks

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

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

2.1.3. Types of Financial Performance Analysis

The nature of financial analysis differs depending on the purpose of analyst. Financial statement analysis can be categorized into different types on the basis of material use, objective of the analysis and the modulus operandi of analysis (Jain & Narayan, 1989:B23-B25).

a) On the Basis of Material used

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

b) On the Basis of Objective

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

c) On the Basis of Modulus Operandi of Analysis

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

2.1.4. Method of Financial Performance Analysis

An enterprise communicates financial information to users through financial statement and reports. Financial statements are summarized information of the firm's financial affairs, organized systematically. They are the means to present the firm's financial situation to owners, creditors and general public. The preparation of financial statement is the responsibility of top statement under to make investment decisions. So concern authority should be prepared very carefully and contain as much as information as possible.

Two basic financial statements are prepared for the purpose of external reporting to owner, investor and creditors are:
1. Balance Sheet (or Statement of Financial Position)
2. Profit and Loss Account (or Income Statement)

For internal management purpose i.e. for the planning and controlling much information than contained in published financial statement is needed. The accountant or account officer prepares these financial statements at the end of firm's income year. Balance sheet and income statement undoubtedly provides useful financial data regarding the operation of an enterprise but they fail to present all the useful financial data required for major investing and financial decision by the management. Therefore, another financial statement fund flow statement is also in use. It summarized the source from which funds have been applied. It is prepared to show additional useful information not covered by the traditional statements.

2.1.5. Major Steps in Financial Performance Analysis

The basis for financial analysis is financial information obtained from balance sheet and profit and loss account. The analysis of financial statements is completed in three major steps (Srivastav, 1993:56).

The first involves the reorganization and rearrangement of the entire financial data as contained in the financial statements. This calls for regrouping them into few principal elements according to their resemblance and affinities. Thus the balance sheet and income statement are completely recast and presented in the condensed from entirely different from original shape.

The next step is the establishment of significant relationship between the individual components of balance sheet and profit and loss account. This is done through the application of tools of financial analysis.

Ultimately, significance of result obtained by means of financial tools is evaluated. This requires establishment of standard against which actual be compared.

2.1.6. Tools & Techniques of Financial Performance Analysis

To evaluate the financial condition & performance of a company, the financial analyst needs certain yardsticks. The yardstick frequently used is a ratio or index relating two pieces of financial data to each other. Analysis & interpretation of various ratios should give experienced and skilled analyst a better understanding of the financial condition & performance of the firm, than they will obtain from analysis of the financial data alone (Vanhorn, 1999:691-692).

The techniques of analysis are employed to ascertain or measure the relationship among the financial statement items of a single set of statement and changes that have taken place in these items as reflected in successive financial statement. The fundament of the analytical technique is to simplify or reduce the data under review to the understandable terms.

Out of the various techniques, selection of a technique or combination of the techniques depends on the purpose of analysis. Different techniques reveal different facts associated with the business, so some or all of the following major techniques can be used for the analysis depending on the purpose and availability of the materials demanded by the technique.

2.1.6.1 Funds Flow Analysis

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

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

Method of preparing funds flow statement depends essentially upon the sense in which the term 'fund' is used. There are concepts of fund" cash concept, total resources concept & working capital concept. According to cash concept, the word 'fund' is synonymous with cash. Total resources concept represents the total assets and resources as fund. The term 'fund' refers only to working capital on working capital concept. However, the concept of fund as working capital has gained wide acceptance as compared to other concepts. Therefore, any transaction that increases the amount of working capital is taken as source of fund while conducting funds flow analysis. Transaction that decreases working capital is treated as application. But any transaction that affects current liabilities or current assets without any change in working capital is not taken as source or use.

The utility of this technique stems from the fact that it enables shareholders, creditors and other interested persons to evaluate the use of funds. It also enables them to determine how these uses were financed. In the light of information so supplied by statement, the outsider can decide whether or not to invest in the enterprise. It enables finance manager to detect the imbalances in the use of funds and undertaken remedial actions. It serves as control device to measure the deviation between actual use of fund and the estimated budget. An analyst can evaluate the financed pattern of concern (What portion of the growth was financed internally and what portion externally).

In spite of the great significance of funds flow analysis to various parties associated with the business, it is not free from drawbacks. Its shortcomings can be listed as:
- ➢ This is not full proof as it depends on conventional financial statements.
- ➢ It cannot introduce any new items, which causes changes in financial status of the business.

➢ It is not much relevant technique as study of change in cash position is more useful rather than fund position.
➢ It is historical in nature, so, cannot estimate source and application of fund in near future.
➢ It does not reflect the structure and policy changes.

2.1.6.2. Cash Flow Analysis

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

This type of analysis is useful for short-run planning of firm. The firm needs sufficient cash to pay debt maturing in near future, to pay interest and other expenses and to pay dividend to shareholders. The projection of cash flow for near future can be made to determine the availability of cash. This cash balance can be matched with the firm's need for cash during the period and accordingly, arrangement can be made to meet the deficit or invest the surplus cash temporarily.
Though it is more confidential than funds flow analysis for the decisions related to the near future, it is also not free from drawbacks. Its drawbacks can be listed as:
➢ It is not perfect evident as it depends on conventional statements.
➢ It is historical in nature.
➢ It does not reflect structural and policy changes.

2.1.6.3 Trend Analysis

In finance analysis the direction of change over a period of years is crucial importance. Trend analysis of the ratio indicated the direction of change. The kind of analysis is particularly applicable to the items of profit and loss account. It is advisable that trend of sale and net income may be studies in the light of two factors. The rate of fixed companion secular trend in the growth of business and general price level; it might be found in practice that a number of firms would show a persistence growth over a period of years. But get a true trend of growth; sales figure should be adjusted by suitable index of general prices. In other words, sales figures should be deflected for raising price level, which the resulting figures are, graphed us will get a trend of growth devoid a price change. Another method of securing trend of growth and one which can use instead of the adjusted sales figures or as check on them is to tabulated and plot the output or physical volume of sale expressed in suitable units of measure. If the general price level is not considered while analyzing trend of growth, it can mislead management. They may because unduly optimistic period of prosperity and pessimistic in dull period.

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

Trend analysis facilities the horizontal study of the date. But trend ratios are generally not computed for all of items in the statement, as the fundamental objective is to make comparison between items having same logical relationship to one another.

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

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

2.1.6.4 Ratio Analysis

An arithmetic relationship between two figures is known as ratio. Two number used in the ratio are called the term of ratio. The first term is the antecedent and is the divided; the second is the consequent and is the divider. Ratio is computed by dividing one item of relationship with the other. Ratio simply means the relation of one quantity to another of the same kind is defined to be that pure (abstract) number, integral, or fractional, which express the number of times the later is contained in the former.

Ratio analysis is a technique of analysis and interpretation of financial statement to evaluate the performance of an organization by creating ratios from the figure of different accounts consisting in balance sheet and income statement (P/L Account) is known as ratio analysis (Pandey, 994:43-437).

Financial ratios are the basic tools of financial analysis. The operational and financial problem of a corporation can be ascertained by examining the behavior of these ratios. In financial analysis a ratio is used as an index or yardstick for evaluating the financial position and performance of an enterprise. A financial ratio is a relationship between two financial variables and a process of identifying the financial strength and weakness of an enterprise. The liquidity ratio measures the corporations overall efficiency of operation. Similarly, leverage ratio measures the utilization of the corporation's resources. These financial ratios help us to find symptoms of problems. The cause of any problem may be determined only after locating the symptoms. Hence, the study of financial ratios behavior of the corporations assumes great significant.

Ratio Analysis is carried out to develop meaning relationship between individual items or group of items usually shown in the periodical financial statements. An accounting ratio shows the relationship between the two inter-related accounting figures. Ratios are guides or shortcuts that are useful in evaluating the financial position and operations of a company. When the relationship between two figures in the balance sheet is established, the ratio so calculated is called 'balance sheet ratio'. Ratio may be expressed in the form of quotient, percentage of proportion.

Ratio analysis involves two types of comparison for the useful interpretation of the financial statement. A ratio itself does not indicate the favorable or unfavorable position. Most commonly used standards to evaluate the ratio are:
 ➢ Comparison of present ratio with past or expected future ratio.
 ➢ Comparison of the ratio of the firm with those of similar firms over the period of time or with industry average at the same point of time.

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

In view of the requirement of the various users of ratios, they can be classified into four major categories. They are: - liquidity ratio, leverage ratio, activity ratio and profitability ratio.

Liquidity ratio measures the ability of firm to meet its current obligations. Leverage ratio evaluates the long-term financial position of the firm. Activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. Finally, profitability ratios are calculated to measure the operating efficiency of the company.

Though ratio analysis is powerful technique of financial analysis, it should be used with extreme care and considered judgment because it suffers from certain drawbacks. The drawbacks of the ratio analysis are listed below:
 ➢ It is difficult to decide the proper basis of comparison.
 ➢ It calls interpretation to certain aspects of the business, which needs detailed investigation before arriving at any final conclusion.
 ➢ Unless there is a consistency in adoption of accounting methods, ratios may not prove of greater use in case of inter-firm comparison.
 ➢ The price level changes make the interpretation of ratios invalid.
 ➢ The ratios are generally calculated from past financial statements and thus, are no indicators of future.

Ratio Analysis & its Classification

In general ratio may be classified on the following base lending to somewhat overlapping categories (Pandey, 1994:502-503).

A) Traditional Classification

It is classification according to the statement from which ratios are derived. By for the most convenient mode of classification, it has the sanctity of tradition in much as since the advent of ratio analysis. Ratio has grouped in this manner from this angle ratios are classified as:

- ➤ Balance sheet ratios of financial ratios: - These ratios deal with relationship between two items or groups of items, which are together to the balance sheet e.g. debt equity ratio.
- ➤ Revenue statement ratio: - These ratio sometimes also referred as operating ratio establish the relationship between two items or group, which are in the revenue statement e.g. stock turnover ratios.
- ➤ Inter statement ratio or combine ratio: - These ratio portray the relationship between items of one of which part of balance sheet and profit & loss account (income statement).

B) Functional Classification

Ratios are grouped in accordance with certain test which they are intended to sub-serve from the point of view of varies parties having a financial interest in an enterprise test are:

- ➤ Test of liquidity
- ➤ Test of profitability
- ➤ Market test etc.

C) Classification According to Nature

These ratios are classified from the point of view of financial management. They are:

1) Liquidity Ratio
2) Activity Ratio
3) Leverage Ratio
4) Profitability Ratio

1) Liquidity Ratio: - A liquidity ratio is assigned to find out the current assets intensifies and financial structure. In other words, liquidity ratio measures the ability of an enterprise to meet its current obligations. A core of liquidity ratio has emerged over the year which, when viewed in their totality and with respect to risk, is expected to yield a rough approximation of the business to pat its current liabilities and when they fall due for payment. Regarding the position of liquidity ratio, a current ratio 2:1 is considered acceptable for most of firm although it is only rule of thumb standard and it is 1:1 for quick ratio. Though, it depends much on circumstances in case of seasonal business (Pradhan, 1986:17).

2) Activity Ratios: - Activity ratio also known as turnover ratio, indicate the speed with which assets are being converted or turned over into sales. This ratio is employed to evaluate the sales efficiency or activity and short-term liquidity or activity of an enterprise. These ratios also measure the degree of effectiveness in use of fund by a firm.

The common ratios of activity/turnover ratios are as follows:
- Inventory turnover ratio
- Debtors turnover ratio
- Average assets turnover ratio
- Fixed assets turnover ratio
- Current assets turnover ratio
- Total assets turnover ratio
- Capital employed turnover ratio

3) Leverage Ratio: - The use of finance is refers by financial leverage. These ratios are also called solvency ratio or capital structure ratio. To judge the long term financial position of the firm the leverage ratios are two aspects of the long term solvency of the firm i.e. ability to repay the principle when due and regular payment of interest to the debt holder with the help of this ratio management can make the sound financial decisions about the approximate mixed of equity & debt. The following ratios are included in leverage ratios:
- Debt Equity Ratio
- Debt to Total Capital Ratio
- Interest Coverage Ratio

4) Profitability Ratio: - Profitability ratio shows the overall efficiency of the business concerns/corporations. The relation of return of firm to either its sales or its equity or its assets is known as profitability ratios. In other words, we can say that profitability ratios is used to measure the success of an enterprise in terms of its earning on sales or on investment, profitability ratios are of two types.
- Profitability in relation to sales
- Profitability in relation to investment

2.1.7. Limitations of Financial Performance Analysis

From the above discussion, it has been evident that financial performance analysis of great significance for investor, creditors, management, economist and other parties having interest in business. It helps management to evaluate its efficiency in past performance and take decisions relating to future. However, it is not free from drawbacks. Its limitations are listed below (Jain & Narayan, 1989:B23-B25):

a) **Historical Nature of Financial Statements: -** The basic nature of statements is historical. Past can never be a precise and infallible index of the future and can never be perfectly helpful for the future forecast and planning.

b) **No Substitute for Judgment:** - Analysis of financial analysis is a tool to be used by expert analyst to evaluate the financial performance of a firm. That's why; it may lead to faculty conclusion if used by unskilled analyst.

c) **Reliability of Figures:** - Reliability of analysis depends on reliability of figures of the financial statements under scrutiny. The entire working of analysis will be vitiated by

manipulation in the income statement, window dressing in the balance sheet, questionable producers adopted by the accountant for the valuation of fixed assets and such other facts.

d) **Single year Analysis is not much valuable:** - The analysis of these statements relating to single year only will have limited use and value. From this, one cannot draw meaningful conclusion.

e) **Result may have different interpretation: -** Different users may differently interpret the result derived from the analysis. For example, a high current ratio may suit the banker but it may be the index of sufficiency of the management due to under-utilization of fund.

f) **Changes in Accounting Methods: -** Analysis will be effective if the figures derived from the financial statements are comparable. Due to change in accounting methods, the figures of current period may have no comparable base, and then the whole exercise of analysis will become futile.

g) **Pitfall in inter-firm Comparison: -** When different firms are adopting different procedures, records, objectives, policies and different items under similar heading, comparison will be more difficult. If done, it will not provide reliable basis to assess the performance, efficiency, profitability and financial condition of firm as compared to whole industry.

h) **Price level change reduces the validity of analysis: -** The continuous and rapid changes in value of money, in the present day, economically also reduces the validity of the analysis. Acquisition of assets at different levels of prices make comparison useless as no meaningful conclusion can be drawn from a comparative analysis of such items relating to several accounting period.

i) **Selection of Appropriate Tool: -** There are different tools of analysis available to the analyst. The tools to be used in a particular situation depend on skill, training, intelligence and expertise of analyst. It wrong tool is used, it may give misleading result and may lead to wrong conclusion, which may be harmful to the interest of business.

2.2 Review of Related Articles

There are some studies conducted in the field of financial performance analysis by various researchers and authors. Some of them have been reviewed in order to avoid possible duplication and bridge the gap.

The first & foremost of any commercial banks is to maintain sufficient liquidity of its fund by properly managing current assets and current liabilities. Maintenance of satisfactory level of liquidity is sufficient enough to meet the deposits liabilities that are to be paid on demand not only that the liquidation position determines. The deposits paying ability of the bank but at time ensures the smooth operation to a considerable extent (Shrestha, M.K. 1987)

Consideration of liquidity requires that the bank should be able to pay cash on demand. Since bulk of deposit liabilities of commercial banks are subject to withdrawal either without notice or a prior notice term, any commercial banks must meet the demand or close its doors go in to liquidator. To be able to meet withdrawal of deposits the bank has to maintain cash reserve, which will very as the composition of total deposits changed (Vansh, 1978:16).

Every bank strives to maximize its net profit earnings by employing its surplus cash by lending it to trade and industry against tangible and / or personal securities in a manner to pay on demand the acquired funds to their owners or persons named by them (Vansh, 1978:19).

He further stated the two principal items of the assets portfolio of banks are the advance or bank credit & investment and other securities. Many countries have provided for the statutory provisions regarding the minimum percentage of bank deposits that must be invested in government securities. Similarly, the central bank may and frequently does determine the size and distribution of aggregate bank credit in the economy.

New banks were being opened and existing banks busy opening new branches all over the country. The media was used extensively, to announce new products such as ATMs, new facilities and services, remittances, loans etc and mostly to establish each bank as a more viable option compared to other banks. A pretty picture that mesmerized the public into thinking that banks are doing well

In the last decade, just as the banks were emerging to take financing to new heights, that Nepal Stock Exchange too was just spreading its wings. It was no coincidence that the major scrip being bought and sold at the NEPSE, as was mainly Nepal Stock Exchange is known as was mainly that of the private commercial banks. Even today, the major transaction at NEPSE, determining the daily up or down as the case may be is governed by the transactions in share of private commercial banks (Business Age International 2005, Feb)

In recent time the commercial banks have witnessed proliferation of commercial banks. However the Nepalese public has not been able to reap the potential benefits from the government's efforts of liberalized reform. This can be blamed on lack of a healthy competition. Market-oriented approaches should be promoted to encourage competitive pressure than priority sector lending, branch opening criteria and interest rate spreads. These directives can act as disincentives and even create negative impacts. However, the proliferation of bank has made banking facilities available to a wider population. For example, Bank of Kathmandu in line with its vision to contribute to economic development of Nepal has tailored product such as Sajilo Bachat Khata, which can be opened at a minimum balance of Rs.1000 with an interest of 2.25 percent (Bhandari, 2005, Feb)

Mr. Gopal Shrestha (2004: April-May) in his article-Two Decades of Private Sector Bank in Nepal: An analysis, on which he had analyzed 15 private commercial banks and presented their audited financial indicators ending 2059/60 (mid July 2003). As a FY 2002/03, private sector commercial banks have mobilized more than Rs.107 billion in deposits and utilize Rs.67 billion through loans & advances with a gross credit deposit ratio of nearly 78%. Net worth of the sector is more than Rs.9 billion and the shares of this sector represent a significant proportion of shares traded in the securities market. In fact, share market growth can be attributed to the private sector commercial banks of the country.

His findings are:

➢ Private sector bank has invested more than Rs.20 billion in HMG securities, which along with mandatory CRR requirement are utilized to meet the resources gap of the government. This sector is providing lucrative employment opportunities. Directly and indirectly, a larger sector of work force has found employment because of the investing activities of the sector.

- Non-Performing Assets (NPAs) of this sector are hovering around 8%, which is slightly higher than the internationally acceptable level of 5%. However as this sector has also built up loan loss provision to the extent of nearly 6% this will definitely cushion any disaster emanating from the level of NPAs.
- Private sector banks used to accessible to the influential class in the earlier decades have started to serve the common people also which in turn has improved the purchasing power of the common people.
- They have contributed handsomely in developing international trade and in routing remittances through the formal channel. Service orientation of the private sector banks have changed the perception of the common man that banks are meant for the service3s of common people, whereby improving the total economic scenario. These banks have assisted in the integration of our country with the modern global village, which would have a pious wish without such assistance.

Lastly, analyzing the performance of private sector commercial banks of Nepal, he concluded that private sector is definitely a boon for the economy, the benefits of capitalistic economics and there should be no skepticism for adapting the same in the context of our country also.

Mr. Prithivi M. Shrestha (2004, March), had written an article on Foreign VS Nepali Management in Nepalese Bank, in which he had taken the example of two Government banks i.e. NBL & RBB, which is handling over the management contract to foreign management team in one side and other hand three private sector joint stock banks i.e. NIBL, BOK and NCC, which were once managed by foreign nationals but now have come under Nepalese management. He assessed the comparative well being of the banks under Nepali and foreign management team.

After reviewing the financial statement of these banks, he finds out the following:
- All three banks are seen to have achieved good growth rate after the full ownership of the banks come Nepali citizen and they operate under Nepali management. This success has challenged the traditional thinking that Nepali managers have little capability as far as handling of banks successful goes.
- In RBB & NBL, following the contradiction by KPMG an international auditing institution that the largest banks of Nepal have bankrupt, the grapevine suggests that reform in these banks were at earlier essential. Due to the large amount of NPA, of up to an incredible 48 percent, the banks were said to be unable to sustain themselves.
- So the management of NBL & RBB went to handle of foreign manager with the condition that they should bring down the NPA rate at of 5-10 percent within 2 years.
- The period of contract is about to finish in the case of NBL, while RBB's contract period has also crossed a year. But they have so far become unable to bring down the NPAs in the two banks to the said level.

Lastly Mr. Shrestha concluded that the argument of those who opposed the idea of giving management to foreigner as that it would be appropriate to choose Nepali managers to handle these banks. None, however, seem sure that Nepali managers can manage these banks

properly. It would naturally be tough for any management to recover loans in such economic recession as well as false valuation of the collateral. However, there is a question that foreigners have also been unable to make progress as expected. The large sum of money has been spent as salary and allowance for the advisors. It is reasonable, therefore, to expect promised returns.

The study conducted by KPMG Basnet group, an international audit company, on financial status of Nepal Bank Limited (NBL) & Rastriya Banijya Bank (RBB) in March 2000 concluded that RBB & NBL are insolvent. Both the bankers' banks management is out of control and it seems very weak. Lack of independent capable supervision, weak legal & accounting practices, lack of rational banking strategies as well as the skills are major problems of these banks. The report further states that these banks are politically driven. Many years of political interference in term of senior appointments as well as lending and operating decision are the main causes of these banks' failure. It is also mentioned in the report that the estimated combined losses of these two banks are somewhere between Rs.15 to 30 billions.

Therefore, to improve upon the state of these banks KPMG suggest taking the following steps. They are:
  ➢ Demonstrate high-level commitment to an independent commercially run banking system.
  ➢ Institute emergency measure to limit the damage at NBL & RBB.
  ➢ Design & invest in bank restructuring programs.
  ➢ Develop and implement long run plans to current environment weakness.

Traditionally, banks act as financial intermediaries to channel funds form excess units to deficits units. Unlike other non-bank financial companies, commercial banks do not produce any physical goods. They produce loans and financial innovations to facilitate trade transactions. Because of special role play in the economy, concerned authorities heavily regulate them. Analysis of banks' financial statement is different from that of other companies due to the special nature of assets and liabilities (Paudel, 2053:64-69).

Balance sheet, profit and loss account and the accompanying notes are the most widely aspects of financial statements of bank. The bank's balance sheet is composed of financial claims as liabilities in the form of deposit and as assets in the form of loans. Fixed assets account for a small account for a small portion of the total assets. Financial innovations, which are generally contingent in nature, are considered as off-balance sheet items. Interest received on loans and advances and investment and paid on deposit liabilities are major components of profit and loss account. The other sources of income are fee, commission, discount, service charge etc.

The users of financial statements of a bank need relevant, reliable and comparative information to evaluate the financial performance and position and hence make economic decision. "Commercial Bank Act-1974" requires the audited balance sheet and profit and loss account to be published in the leading newspaper for the information of general public.

Most of the users of financial statement are interested in assessing the bank's overall performance. Following factors affect the evaluation of bank's overall performance:
  ➢ The structure of balance sheet and profit and loss account.

- ➤ Operating efficiency and internal management system.
- ➤ Managerial decisions taken by the top management regarding interest rate, lending policies, exchange rates etc.
- ➤ Environment changes such as change in technology, government, competition, economy etc.

As loans account a substantial portion of bank's total assets, poor quality of loans would subject bank to a higher risk of default or non-payment. Classifying total loans and advances into performing assets and non-performing category can assess the quality of loan portfolio into different categories. The bases of classification are aging, overdue, repayment position, and quality of collateral and financial position of borrowers. Capital adequacy of the bank is assessed on basis of risk-weighted assets. It indicates bank's financial strengths and solvency. Bank, facing capital adequacy problem, may increase capital or reduce the existing assets structure in order to maintain the desired level of capital base. Liquidity is measured by the speed with which a bank's assets can be converted into cash to meet deposit withdrawal and other current obligations.

A bank is subject to a minimum cash reserve requirement imposed by central bank to ensure that a minimum amount of total assets are held in liquid form to meet unexpected withdrawal.

2.3 Review of Previous Masters' Thesis

Bhattarai, Ramala (1978), in her study on **The Lending Policy of Nepalese Commercial Banks in Nepal,** has conducted that an important aspect of commercial bank is leading its fund effectively than the collection of deposits if a bank can not lend its resources properly, the resources in collection deposits will also be useless. Instead of developing the country's economy, it creates greater disparity on the economic life of the people. Low capital formation means lesser rate of development when all the resources will be lacked up capital formation will not be possible. As a result only an increase in all interest rate cannot develop the economy of the underdeveloped countries through higher motivates both savers & big savers.

Shrestha, M.B (1981), conducted **A Study of Financial Performance of Koshi Rice Export Company Limited,** in term of ratio analysis, fund flow analysis and trend analysis for four years period, some of major finding of the study was:
- ➤ The liquidity position of enterprise was found poor.
- ➤ The total assets turnover was extremely leveraged.
- ➤ The return on shareholders equity was found decreasing & come down to 6 percentages from 35.7% four years back.

Mr. Shrestha has recommended some measure on the basis of his studies. His major recommendations were:
- ➤ He has suggested improving the credit collection performance and maintaining an adequate bad debt provision.

> He has suggested checking the huge amount of advance forwarding that hampers working capital and quality of liquidity.

Joshi, Keshav Raj (1989), in his thesis **A Study on Financial Performance of Commercial Banks,** analyzed the different ratios of Nepal Arab Bank Limited and Rastriya Banijya Bank for the period of five years till fiscal year 1989 concluded that liquidity position of commercial bank is sound. Their debt to equity ratio is high, which doubt on solvency debt to equity ratio of local commercial bank is higher than joint venture banks. Conservation policy is followed by commercial banks for assets utilization that is why investment is done in loans and advances. Asset utilization for earning purpose is two third of the total assets. The main source of income for these banks is interest from loans and advance and overall profitability position of NABIL is better than others. He recommended dividend payout ratio of commercial banks should be determined keeping in mind the shareholder's expectation and growth requirement of the banks.

Bohara, Bhoj Raj (1992), has conducted a research on Comparative Study of the Financial Performance of NABIL and NIBL. His major objective was to highlight the financial performance and role of joint venture banks in the economy. He attempt to analysis the financial performance with the help of financial analysis and he derived the strength and weakness of two major joint venture banks by calculating liquidity ratio indicating ratios. Mr. Bohora comes out with some valuable suggestion to the joint venture banks, which are as follows:
> Joint venture banks need to make balance between disbursing of cash dividend and issuing of bonus shares.
> These banks need to increase their equity base to maintain their capital adequacy.
> They need to maintain liquidity in the form of cash reserve ratio as per NRB rules.

The thesis entitled **An Appraisal of Financial Position of Nepal Bank Limited,** by Amatya, Nagendra Bahadur (1993), analyzed, examined and interpreted the financial position of bank form 1980/81 to 1989/90. Their study reflects that the liquidity position of banks has fairly maintained and the bank has found to have adapted the conservative financing policy i.e. low position of equity capital has been restored to finance total asset.
The bank has successfully operated beyond the breakeven point over the study period. Main finding of his study are:
> Regarding the liquidity management, the bank is in better position but the bank has been following uniform policy to finance current assets and current liabilities.
> The bank is successful in deposit collection but it has always adapted conservative and traditional credit policy.
> The trade and commerce advances are playing major role in the credit composition of the bank. Although the reserve of the bank is increasing gradually, the reserve plays a nominal role in the credit expansion control.
> The major portion of investment of the bank is in HMG's securities, and the volume of transaction is high in all respect but the bank does not show higher rate of profit or it shows a decreasing trend of profit.

Mr. Yogendra Regmi (2003) in his articles "Factors affecting profitability of the bank" concluded that to run the bank there is need of different types of expenses like staff expenses, office expenses, and other expenses. These expenses can be controlled by increasing efficiency and effectiveness, knowledge, skill, strength etc. To increase the income of the bank there is necessary to increase quality of loan. It should not disburse loan rather than to disburse in poor sector where there is less possibility of refund. While disbursing loan there is needed to do proper identification and selection of mortgage, reliable and responsible customer should be selected. There is need to motivate (rememorize) the customer for timely payment of interest.

Shrestha (2006) conducted a study on "Nepal Rastara Bank Guidelines on Investment Policy of Commercial Banks in Nepal (A Case Study of Nepal Investment Bank Limited.)" With objective of

- ➢ To highlight the NRB directives regarding investment policy (Loan, advances and investment)
- ➢ To analyze the liquidity of NIBL.
- ➢ To find out relationship between total deposit and loan and advances, total deposit and total investment.
- ➢ To make the trend value analysis of deposit utilization and its projection for next five years.
- ➢ To find out whether NRB guidelines are actually being implemented.

The study was conducted on the basis of secondary data.

The main finding of the study is:

Bank in good position to meet the daily cash requirement as bank maintain the average cash and bank balance in respect to total deposit. The performance of NIBL regarding deposit collection, granting loan and advances and investment is quite satisfactory but does not seem to follow a 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 and significant relation between total deposit and loan and advances and current assets and current liabilities and loan loss provision and loan advances but there is negative and no significant relationship between outside assets and net profit. Trend analysis and projection for next year of total deposits, loan and advances, investment and net profits are in increasing trend.

Kafle (2006) in his study entitled "Non-performing Loans of Nepalese Commercial Banks." The researcher's main objectives of the study are:

- ➢ To know the problems of the non-performing loans and its effect in the ROA and ROE of the Nepalese commercial banks.

- To find out whether the Nepalese commercial banks are following the NRB directives regarding loan loss provision for non-performing loan or not.

The major findings of the study are:

Through the research he has found that the no banks have been following NRB's directives regarding the loan loss provision. He also conclude that the return on assets (ROA) and return on equity (ROE) of the bank deposed upon the NPLs. The high degree of negative correlation between NPL and ROA and NPL and ROE clearly indicates that there is inverse relation between them. He has recommended that for the smooth operation of the commercial banks, the NPLs should be controlled. For this bank should provide necessary training regarding loan management to the manpower's. In order to remove, the NPLs, banks should take enough collateral so that banks can recover its loan amount. For the loan loss provision as per the NRB directive and to reduce the NPL, the bank management should be effective and the NRB's monitoring and regulation is necessary.

Thapa (2008) entitled "A Study of Non-performance Assets of Nepalese Commercial Banks in Nepal" of the period from FY 2001 to FY 2007.

The objectives of the study are as below:

- To highlight loans and advances trend in commercial banks.
- To point out the amount of NPAs in Nepalese commercial banks.

The major findings of his study are as follow:

- The status of non-performing loan of commercial banks shows that, they are making positive improvement over it. By the end of mid July 2007, the ratio of non-performing loans to total loan and advances declined to 9.65%. Total amount of non-performing loan remained to Rs. 22182.9 million in the same year. In the last year the percent and amount of non-performing loan were 14.22% and Rs. 26770.42 million respectively.
- Loans and advances, the major component of assets, constituted the 46.66% of total assets in mid July 2006. Similarly, investment and liquid funds, another component of assets, registered the 19.06% and 8.98% of total assets in the same year. In the preceding year the respective share of loan and advances, investment and liquid funds were 40.44%, 19.15% and 9.06%. In the current year the loan and advances increased by higher rate of 32.05% compare to 8.61% in the last year. By the end of mid July 2006 the total outstanding amount of loan and advances of commercial bank reached to Rs. 228951.9 million. It was Rs. 173383.4 million in mid July 2005.
- In the current fiscal year deposit mobilization of commercial bank marginally increased by 15.88% compare to 15.39% growth in the previous year. By the end of mid July 2006 it reached to Rs. 337497.2 million from Rs. 291245.6 in the last year. Of the component of deposit, current deposit celebrated by higher rate of 20.45% compared to 13.75% in

the previous. However, saving and call deposit growth rate slipped to 15.23% and 18.62% compare to 16.65% and 28.51% respectively.

➢ Liquid funds increased by 14.45% and reached to Rs. 44089.7 million in mid July 2006 from Rs. 38842.1 million in mid July 205.

➢ In the current fiscal year the net profit of the banking system grew by slower rate of 10.20% compared to 53.38% in the last year. By the end of mid July 2007 the net profit amounted to Rs. 8797.9 million from Rs. 7983.5 in mid July 2006.

CHAPTER III
RESEARCH METHODOLOGY

Research methodology refers to the various sequential steps to be adopted by the researchers in studying the problem wit certain objectives in views. It is the process of arriving to the solution of the problem through planned and systematic dealing with the collection, analysis and interpretation of the facts & figures. It consists of research design, population sampled, and source of data, data processing procedure and tools & techniques of analysis of data.

3.1 Research Design

Research design is plan structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances (Kothari, 1994:43). Research design is plan for collection and analysis of data. It represents a series of guideposts enable the researcher to progress in the right direction in order to achieve the goal. The purpose of design is to provide answer to research questions and control variance. Some financial & statistical tools will be used to examine the facts and descriptive techniques to evaluate the financial performance of two banks and comparing between themselves.

This study aims to find out the relation of financial performance of two commercial banks fully managed and owned by Nepalese entrepreneurs. The research design used for is basically, a historical, empirical, descriptive-cum-analytical research methodology.

3.2 Population and sample

Currently, there are more than 17 commercial banks in Nepal among which Nepal Bank Limited, the first commercial bank of Nepal and Rastriya Banijya Bank are government owned commercial banks and rest commercial banks – nine commercial banks are joint venture with foreign banks and six are private commercial banks. But among the nine joint venture banks, three banks are operating with domestic investment and Nepalese management viz. Nepal Investment Bank Limited, Bank of Kathmandu and Nepal Credit and Commerce Bank Limited. So the researcher chooses the Bank of Kathmandu Limited and fully established by Nepalese promoters Bank. The financial statements of latest five years (i.e. from FY 2061/062 to FY2065/066) have been taken as sample data for analyzing the financial performance. This banks is chosen because as its account for the considerable market share of banking sector.

3.3. Nature and Source of Data

The study is mainly based on secondary data. Data relating to financial performance of these two banks are directly obtained from concerned banks. The supplementary data were obtained from unpublished official records of concern banks, bank's staff, booklets, journals and other sources viz. Security Exchange Center and Nepal Rastra Bank.

3.4. Data Processing Procedure

The data analysis tools are applied as simple as possible. Data obtained from the various sources cannot directly be used in their original form. They need to further verified and simplified for the purpose of analysis. Data, information, figures and facts so obtained need to be checked, rechecked, edited and tabulated for computation.

According to the nature of data, they have been inserted in meaningful tables, which have been shown in appendices. Homogeneous data have been sorted in one table and similarly various tables have been prepared in understandable manner, odd data are excluded from the table. Data have been analyzed and interpreted using financial and statical tools. The detail calculation that cannot be shown in the body part of the report are presented in appendices at the end of the report.

3.5 Tools and Techniques of Analysis

On the basis of historical data financial and statistical tools are used to analysis of different variables.

3.5.1 Financial Tools

Financial tools are those, which are used for the analysis and interpretation of financial data. These tools can be used to get the prescribe knowledge of business which in turn are fruitful in exploring the strength and weakness of the financial policies and strategies. In order to meet the purpose study, following financial tools have been used.

3.5.1.1. Ratio Analysis

Ratio analysis is a powerful tool of financial analysis. An explained in second chapter, ratio analysis is most frequently used tool to evaluate the financial health, operating result and growth of the banks under scrutiny. It helps to summarize the large quantities of financial data and to make quantitative judgments about the firm's financial performance.

Ratio can be calculated between any two items of financial statements. It means there may be as many ratios as there are the numbers of items. But under the ratio analysis technique, it is not practical to work out all the ratios. Hence only the required ratios have been worked out. The ratios calculated for the study is described separately under following headings.

3.5.1.1.1. Liquidity Ratios

Liquidity ratios are employed to measure the company's ability to meet short-term obligation. These ratios provide insight in to the present cash solvency in the event of financial condition. The ratio is used to measure the company's short-term obligation with short-term resources

available at given part of time. The ratio is also known as solvency ratio or working capital ratio. It is extremely essential for a firm to be able to meet its current obligations as they become due. A firm should ensure that it does not suffer from lack of liquidity, and also that is not too mush highly liquid. Lack of sufficient liquidity will result on bad credit worthiness & loss of creditor's confidence. In the context of intense competition in the banking sector, insufficient liquidity will leave the concerned bank behind. On the other hand, high liquidity is also bad as it results in lower profitability because of underutilized assets.

Therefore, it is necessary to strike a proper balance between liquidity and lack of liquidity (Pandey, 1994:101). Depending on the special nature of current assets and current liabilities of the banks the following ratios are calculated.

a) Current Ratio

Current ratio is also known as working capital ratio. It shows the bank's short-term solvency. It is the ratio of current assets and current liabilities. It indicates the availability of the current assets in rupees for every one rupee of current liability. As a conventional rule, a current ratio of 2 to 1 is considered satisfactory. However, this rule should not be blindly followed, as it is the test of quantity not quality. In sprite of its shortcoming, it is a crude and quick measure of firm's liquidity (Pandey, 1994:115). Higher the current ratio betters the liquidity poison and otherwise, the ratio is calculated by dividing current assets by current liabilities.

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

Current assets include cash and assets are just like cash, which can be converted into with in a year. These include cash and bank balance, money at call and short notice, loans and advances, overdrafts, bill purchase and discounted bills for collection, investment in government securities, interest receivables and other miscellaneous current assets. All obligations maturing within a year are included in current liabilities. These consist of current saving and short-term deposits, fixed deposits maturing in that year, borrowings and accrued expenses, bills payable, bank overdraft, dividend payable, customer acceptances and miscellaneous current liabilities.

b) Quick Ratio

Quick ratio established a relation between quick asset and current liabilities. An asset is liquid if it can be converted into cash immediately or reasonable soon without a loss of value cash is the most liquid asset. Other assets which are considered to be relatively liquid are included in quick assets are book debts and marketable securities. This quick ratio can be calculated by dividing the total of liquid assets by total current liabilities.

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

c) Cash and Bank Balance to Current Assets Ratio

This ratio is found out the ability of banks to pay total call made on current deposit. Cash and Bank Balance are highly liquid assets than others in current assets proportions. Higher ratio indicates the banks ability to meet the daily cash requirement of their customer deposit and vice versa. But higher ratio is not preferred as the bank has to pay more interest n deposit and will increase the cost of fund. Lower ratio is also very risky as the bank may not be able to make the payment against the cheque presented by the clients. So, the bank has must be maintain such ratio in such way that it should have sufficient cash for the clients demand against deposits when required and less interest is required to pay against the cash deposit. These ratios not only analyzed the use of total resources of the firm but also the use of resources component of total assets. The formula to obtain this ratio is:

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

Cash and Bank balance includes cash in hand, foreign cash in hand, clearing cheque and other cash items, balance with NBR current account, other domestic bank current account and balance held in foreign banks.

d) Cash and Bank Balance to Current, Saving & Margin Deposit Ratio.

The ratio measures the ability of bank to meet its immediate obligations. The bank should maintain adequate cash and bank balance to meet the unexpected as well as heavy withdrawal of deposits. High ratio indicates sound liquidity position of the bank. However, too high ratio is not good enough as it reveals the under utilization of fund. The ratio is computed by dividing the total amount of cash and bank balance held in the bank by total deposit (expect fixed deposits) collected by the bank.

$$\text{Cash \& Bank Balance to Deposits (Expect FD Ratio)} = \frac{\text{Cash \& Bank Balance}}{\text{Total Deposit (Expect Fixed Deposits)}}$$

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

e) Cash & Bank Balance to Total Deposits Ratio

The ratio is employed to measure whether cash & bank balance is sufficient to cover its current call margin including deposits. It shows the proportion of total deposits held as most liquid assets. High ratio shows the strong liquidity position of the bank.
But too high ratio is not favorable for the bank because it produces adverse effect in profitability due to idleness of high interest bearing fund. The ratio is calculated using following formula:

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

Total deposit consists of both interest bearing deposits & non-interest bearing deposits i.e. current deposits, saving deposits, fixed deposit, money at call and short notice and other deposits.

f) NRB Balance to Current Saving Deposit Ratio

The ratio shows the percentage of amount deposited by the bank in Nepal Rastra Bank (NRB) as compared to current & saving deposits. Commercial banks are required to hold certain portion of current and saving deposits in Nepal Rastra Bank's account. It is to ensure the smooth functioning and sound liquidity position of the bank. As per the directive of Nepal Rastra Bank, the required ratio is 8%. Therefore, the ratio measures whether the bank is following the direction of NRB or not. The ratio is computed by dividing the balance held with the Nepal Rastra Bank by saving deposits. It express as:

$$\text{NRB Balance to Current and Saving Deposit Ratio} = \frac{\text{NRB Balance}}{\text{Current \& Saving Deposits}}$$

g) NRB Balance to Fixed Deposit Ratio

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

$$\text{NRB Balance to Fixed Deposit Ratio} = \frac{\text{NRB Balance}}{\text{Fixed Deposits}}$$

3.5.1.1.2 Efficiency/Activity/Turnover Ratios

The fund of creditors and owners are invested in various assets to generate income and profit. Better the management of assets, the larger the amount of income. Activity ratio measures the degree of effectiveness in use of resources of fund by an entrepreneur. This ratio is also called turnover ratio because they indicate the number of times the assets are being converted or turnover into income. In other words, turnover ratios, also known as utilization ratios or activity ratios are employed to evaluate the efficiency with which the firm manages and utilizes its assets. They measure how effectively the firm uses investment and economic resources at its command. High ratio depicts the managerial efficiency in utilizing the resources. They show the sound profitability position of the bank. Low ratio is the result of insufficient utilization of resources. However, too high ratio is also not good enough as it may be due to the sufficient

liquidity. Depending upon special nature of assets and sales of the banks, following ratios are tested.

a) Loans and Advances to Total Deposit Ratio

The ratio indicates the proportion of total deposits invested in loans and advances. It is calculated to find out how the banks are successfully utilizing their total deposits for profit generating purpose on loan and advances. High ratio means the greater use of deposit for investing in loans and advances. In other words, greater the ratio implies the better utilization of outsiders fund (Total Deposits). But very high ratio shows poor liquidity position and risk in loans. On the contrary, too low ratio may be the cause of idle cash or use of fund in less productive sector. The ratio is computed by dividing total loans and advances by total deposit liabilities.

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

Loan and advanced consist of loans, advances, cash credit, overdrafts, and foreign bills purchased and discounted.

b) Loans and Advances to Fixed Deposit Ratio

The ratio indicates what proportion of fixed deposits has been used for loans and advances. Loans and advances are the major sources of investment to generate income by the commercial banks. Fixed deposits are long-term interest-bearing obligation. It carries high rate of interest. Funds collected are needed to invest in such sectors, which yield at least sufficient return to meet the obligations. The ratio measures the extent to which the fixed deposits are utilized for the income generating purpose. High ratio means utilization of fixed deposit in form of loans. The ratio is calculated by dividing loans and advances by fixed deposits.

$$\text{Loans and Advances to Fixed Deposits Ratio} = \frac{\text{Loans and Advances}}{\text{Fixed Deposits}}$$

c) Loans and Advances to Saving Deposit Ratio

The ratio indicates how many times the short-term interest bearing deposits are utilized for generating the income. Saving deposits are the short-term interest bearing liabilities. Loans and advances are the major sources of investment to generate income in commercial banks. Loans and advances to saving deposits ratio is measured to find out how many time of fund is used in loan and advances against saving deposit. High ratio indicates greater utilization of the saving deposits in advancing loans. The ratio is calculated dividing the amount of loan and advances by total deposit in saving account. The following formula is used to calculate this ratio as:

$$\text{Loans and Advances to Saving Deposit Ratio} = \frac{\text{Loans and Advances}}{\text{Saving Deposits}}$$

d) Investment to Total Deposit Ratio

The ratio shows how efficiently the major resources of the bank have been mobilized. High ratio indicates managerial efficiency regarding the utilization of deposits. Low ratio is the result of less efficiency in use of funds. The ratio is obtained by dividing investment by total deposits collected in the bank.

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

Investment comprises investment its HMG treasury bills, development bonds, company shares and other type of investment.

e) Performing Assets to Total Assets Ratio

The ratio measures what percentage of assets has been funded for income generation. High ratio indicates greater utilization of assets and hence sound profitability position. It is calculated by dividing performing assets by total assets.

$$\text{Performing Assets to Total Assets Ratio} = \frac{\text{Performing Assets}}{\text{Total Assets}}$$

Performing assets include those assets, which are invested for income generating purpose. These consist of loans and advances; bills purchased and discounted investment and money at call or short notice.

3.5.1.1.3 Profitability Ratios

A company should earn profits to survive and grow over a long period of time. It is a fact that sufficient profit must be earned to sustain the operations of the business; to be able to obtain funds from investors for expansion and growth; and to contribute towards the social overheads for the welfare of society. The profitability ratios are calculated to measure the operating efficiency of the company. Management of the company, creditors and owners are interested in the profitability of the firm. Creditors want to get interest and repayment of principal regularly. Owners want to get a reasonable return from their investment (Pandey, 1994:116)

Profitability ratios are calculated to measure the operating efficiency of the company. Various profitability ratios are calculated to measure operating efficiency of business enterprises. Though profitability ratios the lender and investor want to decide whether to invest in particular business or not. To meet the objective of the study, following ratios are calculated in this group.

a) Return on Total Asset

The ratio is measuring the profitability of funds invested in the bank's assets. In other words, it measures the efficiency of bank in utilization of the overall assets. High ratio indicates the success of management in overall working fund i.e. total assets. It is also called bet profit or loss to working fund i.e. total assets ratio or simply called ROA. The firm has to earn satisfactory return on assets or working funds otherwise it survival is threatened. High ratio indicates the success of management in overall operation. Lower ratio means insufficient operation of the bank. It is calculated by dividing net profit after tax (NPAT) by total assets of the bank

$$\text{Return on Assets} = \frac{\text{Net profit After Tax (NPAT)}}{\text{Total Assets}}$$

Net profit refers to the profit after deduction of interest and tax. Total assets mean the assets that appear in asset side of balance sheet.

b) Return on Net Worth

The ratio is tested to see the profitability of the owner's investment. It reflects the extent to which the objective of business is accomplished. All commercial banks have its main objective to earn the maximum profit, so that they can run smoothly and get the fame. For that they must mobilize resources and its equity capital properly. Equity capital is owned capital of banks. The ratio is also called net profit (or loss) to net worth or net profit (or loss) to shareholders equity or return on shareholders equity or simply called ROSE. The ratio is of great interest to present as well as prospective shareholders and also of great significance to management, which has the responsibility of maximizing the owner's welfare. So, higher ratio is desirable. It is computed by dividing net profit after tax by net worth.

$$\text{Return on Net Worth} = \frac{\text{Net profit After Tax (NPAT)}}{\text{Net Worth}}$$

Net worth refers the owner's claim on banks. It can be find out subtracting the total liabilities from total assets. It includes shareholders reserve and share capital.

c) Return on Total Deposit

Major financial source of a bank is deposit collection, and deposits are mobilized for loan and advances, investment etc. to earn profit. The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio is the index of strong profitability position. The ratio is computed by dividing net profit after tax by total deposit.

$$\text{Return on Total Deposit} = \frac{\text{Net profit After Tax (NPAT)}}{\text{Total Deposit}}$$

d) Total Interest Expenses to Total Interest Income Ratio

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

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

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

e) Interest Earned to Total Assets Ratio

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

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

3.5.1.1.4 Capital Structure/Leverage/Solvency Ratios

Short-term financial positions refer to the liquidity position of the firm. Long-term financial position refers to the capital structure or financial leverage. Long-term financial position of the firm is judged by the capital structure ratio or leverage ratio or structure ratio. The leverage ratio or structural ratio is calculated to measure the financial risk and the firm's ability of the using for debt the benefit for the shareholders.

Leverage refers to the ratio of debt to equity in the capital structure of the firm. Debt and equity are long-term obligation and remaining parts in the ability side of the balance sheet are termed as short-term obligation. Both types of obligations are required in forming the capital structure or the firm. The long-term financial position of the firm is determined by leverage or capital structure.

Debt is more risky from the form the firm's point of view. The firm has legal obligation to pay interest to debt holders irrespective of the point made or losses incurred by the firm. But use of debt is advantageous to shareholders in two ways:
  ➢ They can retain control on the firm with a limited stake.

> ➤ Their earning is magnified when rate of return of the firm on total capital is higher than the cost of debt.

Following ratios are calculated to test the optimality of capital structure.

a) Debt-Equity Ratio

This ratio is calculated to find out the proportion of the outsider's fund to owner's fund to finance the total assets. It is also called the proportion of outsider's claim and insider's claim on total assets of the banks. It is also called debt to net worth ratio. The ratio shows the mix of debt and equity in capital. It measures creditors' claims against owners'. High ratio shows that the creditors' claims are greater than those of owners. Such a situation introduces inflexibility in the firm's operation due to the increasing interference and pressures form creditors. Low ratio implies a greater than claim of owners than creditors. In such a situation, shareholders are less benefited if economic activities are good enough. Therefore, the ratio should neither be too high nor too low. The ratio is calculated by dividing total debt by shareholder's equity.

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{\text{Shareholder's Equity}}$$

Total debt consists of all interest-bearing long-term debts. These include loans and short-term debts. These include loans advances taken from other financial institutions, deposits carrying interest etc. shareholder's equity includes paid-up capital, reserves and surplus and undistributed profit.

b) Debt-Asset Ratio

This ratio shows the contribution of creditors in financing the assets of the bank. It is the proportion of debt on the total capital or proportion of outsider's claim on total assets. Greater proportion of the banks assets has been financing through outsider's funds. High ratio indicates that the greater portion of the bank's assets has been financed through outsider's fund. The ratio should neither be too high per too low. The ratio can be calculated by dividing total debt by total assets.

$$\text{Debt-Assets Ratio} = \frac{\text{Total Debts}}{\text{Total Assets}}$$

c) Interest Coverage Ratio

The ratio is calculated to find out the banks ability to meet interest obligation. The ratio also known as times interest-earned ratio is used to test the debt servicing capacity of the bank. It shows the number of times the interest charges are covered by funds that are ordinarily available for their payment. It indicates the extent to which the earning may fail without causing any embarrassment to the firm regarding the payment of interest. Higher ratio is desirable, but too high a ratio indicates the firm is very conservative in using debt. A lower ratio indicates

excessive use of debt or insufficient operation. The ratio calculated by dividing net profit before deduction of interest and tax by interest charges.

$$\text{Interest Coverage Ratio} = \frac{\text{Earning Before Interest \& Tax(EBIT)}}{\text{Interest Changed}}$$

EBIT or Earning Before Interest and Tax Net Profit Before Interest and Tax (NPBIT) is amount of operating profit deduction of the amount of interest and tax.

3.5.1.1.5 Capital Adequacy Ratio

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

Over capitalization and under capitalization both have adverse effect on profitability of the firm. If the capital is excess, it remains idle. If the capital is insufficient, the firm may not be able to grasp the opportunity from potential profitable sectors. Therefore, the commercial banks have been directed to retain sufficient ratio by the central bank. Here, capital fund refers to the core capital and supplementary capital. Commercial banks cannot declare and distribute dividend until they meet capital adequacy ratio. Under this group, following ratios are tested.

a) Net Worth to Total Deposit Ratio

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

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

b) Net Worth to Total Assets Ratio

The ratio measures what is the percentage of shareholders fund is relation to the total assets owned by the bank. High ratio means greater contribution of investors' fund and strong capital adequacy position. The ratio is calculated by dividing the net worth by total assets of the bank.

$$\text{Net Worth to Total Assets Ratio} = \frac{\text{Net Worth}}{\text{Total Assets}}$$

c) Net Worth to Total Credit Ratio

It measures the relative proportion of the shareholders fund with respect to the credit. High ratio shows that the firm has adequacy capital, which is the index of safety. Moreover, a bank with

higher ratio is less affected by the instability of the financial market. The ratio is obtained when net worth is dividend by the total credit of the bank.

$$\text{Net Worth to Total Credit Ratio} = \frac{\text{Net Worth}}{\text{Total Credit}}$$

Total credit refers to the total of loans and advances granted, cash credit, overdrafts, bill purchased and discounted.

3.5.1.1.6 Assets Quality Ratios

As explained earlier, turnover ratios measure the turnover of economic resources in terms of quality. Only the investment is not of great significance, but the return form them with minimum default in payment by debtors is significant. A firm may be in a state of enough profit and though unable to meet liabilities. Therefore, asset quality ratios are intended to measure the quality of assets contained by the bank. Following ratios are dealt in the group.

a) Loan Loss Coverage Ratio

Nepal Rastra Bank has directed commercial banks to maintain provision for loan loss on the basis of category of loans and risk grade. The ratio, therefore, measures whether the provision is sufficient to meet the possible loss created by defaulted in payment of loan or not. High ratio indicates that the major portion of loan is risky. The ratio is calculated by dividing provision for loan loss by total risk assets.

$$\text{Loan Loss Coverage Ratio} = \frac{\text{Loan Loss Provision}}{\text{Total Risk Assets}}$$

For the study purpose, risk assets constitute loans and advances, bill purchased and discounted.

b) Loan Loss Provision to Total Income Ratio

This ratio shows what portion of total income has been held as safety cushion against the possible bad loan. Higher ratio indicates that the greater portion of loan advanced by the bank is inferior in quality. Low ratio means that the bank has provided most of its loans and advances in secured sector. The ratio is obtained by dividing loan loss provision by total income.

$$\text{Loan Loss Provision to Total Income Ratio} = \frac{\text{Loan Loss Provision}}{\text{Total Income}}$$

c) Loan Loss Provision to Total Deposit Ratio

It shows the proportion of bank's income held as loan loss provision in relation to the total deposit collected. Higher ratio means quality of assets contained by the bank in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector. The ratio is obtained by dividing the provision for loan loss by total deposit in the bank.

$$\text{Loan Loss Provision to Total Deposit Ratio} = \frac{\text{Loan Loss Provision}}{\text{Total Deposits}}$$

d) Accrued Interest to Total Interest Income Ratio

This ratio shows the percentage of accrued interest with respect to total income in form of interest. High ratio indicates the large portion interest remained to be collected. Lower ratio reflects the better quality of assets in the bank. The ratio is obtained by dividing accrued interest by total interest income.

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

Accrued interest refers to the interest that is accrued but not collected. Total interest income includes the interest received from the investment in various sectors.

3.5.1.1.7 Other Indicators

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

a) Earning Per Share (EPS)

Earning Per Share refers to the income available to the common shareholders on per share basis. It enables us to compare whether the earning based on per share basis has changed over past period or not. The investors favor high EPS. It reflects the sound profitability position of the bank. It is obtained by dividing earning available to common shareholders by number of equity shares outstanding.

$$\text{Earning Per Share} = \frac{\text{Earning Available Common Shareholder (EAC)}}{\text{No of Equity Share Outstanding}}$$

Earning available to common shareholders is the amount of that profit which can be found after deducting the amount of interest to the outsiders' fund, dividend to the preferred shareholders and income tax to the government. For this purpose, it is net profit after tax.

b) Price – Earning Ratio (P/E ratio)

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

$$\text{Price-Earning Ratio} = \frac{\text{Market Value Per Share (MVPS)}}{\text{Earning Per Share (EPS)}}$$

c) Market Value Per Share to Book Value Per Share (MVPS/BVPS)

The ratio measures the value that the financial market attaches to the management and organization of the bank as a growing concern. High ratio is the indication of strong management and organization. It is the ratio of market value per share to book value per share.

$$\text{Market Value Per Share to Book Value Per Share} = \frac{\text{Market Value Per Share (MVPS)}}{\text{Book Value Per Share (BVPS)}}$$

BVPS is net worth dividend by the number of shares outstanding.

3.5.1.2 Income & Expenditure Analysis

Except various analyses, income and expenditure analysis is one of the major tools financial performance analyses of banks. The profit and loss account of the bank is used to find out operating income, expenditure and profit and loss percentage.

This is a tool with the help of which the components of income and expenditure can be compared between two competitive firms. By this analysis, one is able to conclude which sources of income and expenditure are dominant in the related concerns. Under income analysis, overall operating income is split up into and other income. Under expenditure analysis, entire operating expenses are split up into four major headings-Interest expenses, staff expenses, office operating expenses and bonus facility.

Operating profit (loss) is the difference between total operating income and total operating expenses. It total operating income is higher than total operating expenses, and then it is operating profit, otherwise operating loss.

3.5.2 Statical Tools

Various statistical tools can be used to analyze to the researchers. These tools are used in research in order to draw the reliable conclusion through the analysis of financial data. Following tools are used for this purpose.

3.5.2.1 Arithmetic Mean

An average is a single value selected from a group of values to represent them in same way, which is supposed to stand for whole group of which it is a part, as typical of all the values in the group (Waugh A.E). Out of various measures of the central tendency, arithmetic mean is one of the useful tools applicable here. It is easy to calculate and understand and based on all observations.

Arithmetic mean of a given set of observations is their sum divided by the number of observations. In general, if X_1, X_2, X_3 -----------X_n are the given observations, then arithmetic mean usually denoted by X is given by:

$$X = \frac{X_1 + X_2 + X_3 + \text{-----------} Xn}{n} = \frac{\Sigma X}{n}$$

Where, n= number of observations.

3.5.2.2 Standard Deviation

Average like other mean, mode and median gives us the idea of concentration of the items around the central part of distribution. But average do not gives clear picture about the distribution because two distributions with same average may differ in the scatter ness of the items from the central value. To remove this drawback, dispersion is used. Dispersion is defined as the measure of variation I the item from the central value. Among various measure of dispersion, which defined as the positive square root of the mean of the square of deviation taken from the arithmetic means, if X_1, X_2, X_3 -----------X_n are the given observations, then standard deviation denoted by $\dagger$ is given by:

$$\dagger = \sqrt{\frac{\Sigma X^2}{n} - \left(\frac{\Sigma X}{n}\right)^2}$$

Where,
n= number of observation in series X
ΣX = Sum of observations in series X
ΣX^2 = Sum of squared observations in series X

Standard deviation id the absolute measure of dispersion, the relative measure of dispersion based on the standard deviation is known as the Coefficient of Standard Deviation.

$$\text{Coefficient of S.D} = \frac{\text{Standard Deviation}}{Mean} = \frac{\dagger}{\Sigma}$$

The coefficient of dispersion based on standard deviation multiplied by 100 is known as Coefficient of Variance and written as C.V is given by:

$$C.V = \frac{\dagger}{\overline{X}} \times 100$$

It is independent unit. So two distribution can bitterly compared with the help of C.V. for their variability. Less the C.V more will be the uniformity consistency etc. and more the C.V less will be the uniformity consistency etc.

According to Prof. Karl Pearson, coefficient of variation id the percentage variation in mean, standard deviation being considered as the total variation in the mean. It is one of the relative measures of dispersion that is useful in comparing the amount of variation in data groups with different mean.

For comparing the variability of two distributions, we compute the coefficient of variation for each distribution. A distribution with smaller C.V is said to be more homogeneous or uniform or less variable than other. Conversely, a series with greater C.V is said to be more variable or heterogeneous than the other (Gupta, S.C. 2000:769).

3.5.2.3 Correlation Coefficient Analysis

If the distribution consists of two variables then correlation is used to find out the relation between them. Two variables are said to correlation when they are so related that the change in the value of one variable is accompanied by the change in the value of other. Correlation is the measure of relationship between two or more characteristics of population or sample. It is simply measure the chance between the phenomenons's (Joshi, R.P. 2001).

Correlation is a statistical tools with the help of which we can determine whether or not two or more variable are correlated and if they are correlated the degree (extent) and direction of correlation is determined (Shrestha S and Silwal D.P)

Correlation is a statistical tool that we can use to describe the degree of which one variable is linearly related to another. The coefficient of correlation measures the degree of relationship between two set of figure. Among the various method of finding out coefficient (i.e. Karl Pearson's Coefficient of Correlation, Spearman's Rank Correlation Coefficient, Kendall's Tau etc); **Karl Pearson's** method is applied in this study.

If two variables vary in the same direction i.e. if increase (or decrease) in the value of one variable result increase (or decrease) in the value of other variable, then two variables are said have positive correlation.

Similarly, the two variables are said have negative correlation, if they vary in the opposite direction i.e. if increase (or decrease) in the value of one variable result decrease (or increase) in the value of other variable.

One of the widely used mathematical methods of calculating the correlation coefficient between two variables is Karl Pearson's Correlation coefficient. It is also known as Pearson's correlation coefficient and denoted by r_{xy} or, simply r. if x be the one variable and y be the other variable with 'n' number of observation then 'r' is defined as:

$$r = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

Where,
n= number of observation in series X and Y
ΣX = Sum of observations in series X
ΣY = Sum of observations in series Y
ΣX^2 = Sum of squared observations in series X
ΣY^2 = Sum of squared observations in series Y
ΣXY = Sum of the product of observations in series X and Y

The result of correlation coefficient is always lies between -1 & +1
When, r=+1, there is positively perfect correlation between two variables
When, r=-1, there is negatively perfect correlation between two variables
When, r=0, there is no correlation between two variables or the variables are uncorrelated.
Neither the value of r -1 to +1, closer will be relationship between two variables nor will the value of r to 0 lesser be the relationship between two variables.

Probable Error of Correlation Coefficient

Probable error of correlation coefficient is an old measure of testing the reliability of an observed value of correlation coefficient. It is calculated to find the extent to which correlation coefficient is dependable as it depends upon the condition of random sampling.

Probable error or correlation coefficient denoted by P.E(r) is obtained as:

$$P.E(r) = 0.6745 \times \frac{1-r^2}{\sqrt{n}}$$

Where, $\frac{1-r^2}{\sqrt{n}}$ = Standard error

Reasons for taking 0.6745 is that in a normal distribution 50% of observation lie in the range $\sim \pm 0.6745\dagger$ where, $\sim$ and $\dagger$ denoted the population mean and standard deviation.

P.E(r) is used to test if an observed value of sample correlation coefficient is significant of any correlation in the population. It is used to interpret whether the calculated value of 'r' is significant or not.
If r>P.E: correlation is significant. So there is no evidence of correlation

If r>6P.E: r is definitely significant.
In this study, following relationship is calculated;
> Total Deposits and Loan and Advances
> Total Deposits and Net Profit
> Loan and Advances and Net Profit
> Performing Assets and Net Profit
> Total Deposits and Performing Assets
> EPS and MVPS
> MVPS and NWPS

3.5.2.4 Trend Analysis
Trend analysis is a very useful and commonly applied tool to forecast the future event in quantitative term, on the basis of the tendencies in the dependent variable in the past period.
The straight-line trend implies that irrespective or decrease by absolute amount per unit of time. The linear trend values form a series in arithmetic progression.
The tools that are used to show gradually increase or a decrease of variable over a period of time is known as trend analysis. With the help of trend analysis the tendency of variables over the period can be seen clearly. Mathematically, Y= a+bX
Where,
Y= the value of dependent variable
a= Y-intercept
b=slope of the trend line
X= value of the independent variable i.e. time
  = year 063/064 (with regard to the data used in the study)
Normal equations fitting above equation are:
$$\Sigma Y = Na + b\Sigma X$$
$$\Sigma XY = a\Sigma X + b\Sigma X^2$$
Since, $\Sigma X = 0$
$$a = \frac{\Sigma Y}{N}, b = \frac{\Sigma XY}{\Sigma X^2}$$

For this study, the following variables are used: Total Deposit, Loans and Advance, Performing Assets, Net Profit and Net Worth.

3.5.2.5 Diagrammatic & Graphical Representation
Diagrams and graphs are visual aids that give a bird's eye view of a given set numerical data. They present the data in simple and readily comprehensive form. Diagrams are primarily used for comparative studies and can't be used to study the relationship between the variables under study. This is done through graphs.

3.6 Period Covered
This study covers a period five years from FY 2061/062 to 2065/066 of the commercial bank BOK. This analysis is done on the basis of data covering five years.

CHAPTER IV
PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the analysis and interpretation of data following the research methodology dealt in the third chapter. In course of analysis, data gathered from the various sources have been inserted in the tabular form according to their homogeneous nature. The various tables prepared for the analysis purpose have been shown in annexes. Using financial and statistical tools, the data have been analyzed. The result of the analysis has been interpreted keeping in mind the conventional standard with respect to ratio analysis, directives of NRB and other factors while using other tools. Moreover, financial performance of the sampled banks has especially been analyzed in cross sectional manner. Specially, the chapter includes and interpretation of the following:

- ➢ Ratio Analysis
- ➢ Income and Expenditure Analysis
- ➢ Correlation Analysis
- ➢ Trend Analysis

4.1 Ratio Analysis

Ratio analysis has been adopted to evaluate the financial health, operating result and growth of the sampled banks. In order to analyze and interpret the tabled data, the following ratios have been used.

- ➢ Liquidity Ratio
- ➢ Efficiency/Activity/Turnover Ratio
- ➢ Profitability Ratio
- ➢ Capital Adequacy Ratio
- ➢ Assets Quality Ratio
- ➢ Other Indicators

4.1.1 Liquidity Ratio

Liquidity ratio has been employed to test the ability of the bank to pay immediate liabilities (i.e. short term liabilities). These include current ratio, quick ratio, cash & bank balance to current assets ratio, cash & bank balance to deposit (except Fixed Deposits) ratio, cash & bank balance to total deposit ratio, NRB balance to current and saving deposit ratio and NRB balance to fixed deposits ratio.

4.1.1.1. Current Ratio

Current ratio is also known as working capital ratio. It is computed by dividing the current assets liabilities.

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\textit{Current Liabilities}}$$

Table 4.1
Current Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	1.65	1.46	1.42	1.28	1.33

(See: Appendix 4.1.1)

Table 4.1 clearly shows that current ratio of BOK for the study period remained 1.65, 1.46, 1.42, 1.28, & 1.33 respectively from the FY 061/62 to FY 065/66. The ratios of BOK were in decreasing trend. It was highest in FY 061/62 and lowest in 064/65. This above table depicts that BOK could not maintain the conventional standard of 2:1. The nature of assets and liabilities of BOK ratio is below the stated standard may be accepted as satisfactory, but it signifies that the bank has the poor liquidity position.

4.1.1.2 Quick Ratio

Quick ratio establishes a relationship between quick or liquid assets & current liabilities. It is computed by dividing the quick assets by current liabilities.

$$\text{Quick Ratio} = \frac{\text{Quick Assets}}{\textit{Current Liabilities}}$$

Table 4.2
Quick Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	0.52	0.50	0.41	0.25	0.26

(See: Appendix 4.1.2)

Table 4.2 clearly shows that quick ratio of BOK for the study period remained 0.52, 0.50, 0.41, 0.25, & 0.26 respectively from the FY 061/62 to FY 065/66. The ratios of BOK were in decreasing trend. It was highest in FY 061/62 and lowest in 064/65. The standard quick ratio is 1:1 that is quick assets must be equal to current liabilities. It indicates that BOK has very week position of immediate payment of short-term obligation (i.e. current liabilities) because current liabilities were greater than that of quick assets.

4.1.1.3 Cash and Bank Balance to Current Assets Ratio

The ratio shows the ability of banks to pay total call made on current deposits. Cash and bank balance are highly liquid assets in current assets proportion. So, the ratio utilizes higher liquidity

position than current ratio. The ratio is calculated by dividing cash and bank balance by current assets and expressed as;

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

Table 4.3
Cash & Bank Balance to Current Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	7.22%	6.38%	9.77%	5.75%	8.75%

(See: Appendix 4.1.3)

Table 4.3 clearly shows that the ratio remained 7.22%, 6.38%, 9.77%, 5.75%, and 8.75% respectively in different FY. The ratio of BOK shows the fluctuating trend.

4.1.1.4 Cash and Bank Balance to Deposits (Except Fixed Deposits) Ratio

The ratio measures the ability of the banks to meet its immediate obligation. The bank should adequate cash and bank balance to meet the unexpected as well as the heavy withdrawal of deposits. The ratio is computed by dividing the cash and bank balance to total short-term deposits i.e. Saving Deposits, Current Deposits, and Margin Deposits & Call Deposits. It express as;

$$\text{Cash \& Bank Balance to Deposit (except FD) Ratio} = \frac{\text{Cash \& Bank Balance}}{\text{Total Deposits}(\textit{Except Fixed Deposits})}$$

Table 4.4
Cash & Bank Balance to Total Deposit (Except Fixed Deposits) Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	12.27%	9.45%	14.11%	7.51%	11.93%

(See: Appendix 4.1.4)

Table 4.4 clearly shows that the ratio remained 12.27%, 9.45%, 14.11%, 7.51%, and 11.93% respectively in different FY. The ratio of BOK shows the fluctuating trend. Higher ratio indicates sound liquidity position of BOK.

4.1.1.5 Cash and Bank Balance to Total Deposit Ratio

The ratio shows the proportion of total deposits held at most liquid assets. The ratio computed by dividing the cash & bank balance by total deposits.

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

<div align="center">

Table 4.5
Cash and Bank Balance to Total Deposit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	8.31%	6.82%	10.64%	5.74%	8.97%

</div>

(See: Appendix 4.1.5)

Table 4.5 clearly shows that the ratio remained 8.31%, 6.82%, 10.64%, 5.74%, and 8.97% respectively in different FY. The ratio of BOK shows the fluctuating trend. Higher ratio indicates the greater ability to meet their all types of deposits.

4.1.1.6 NRB Balance to Current and Saving Deposit Ratio

The ratio shows the percentage of amount deposits by the banks in Nepal Rastra Bank (NRB) as compare to the current and saving deposits. Commercial banks required holding certain position of current and saving deposits in NRB account. It is computed by dividing the NRB balance by current and saving deposits.

$$\text{NRB Balance to Current and Saving Deposit Ratio} = \frac{\text{NRB Balance}}{\textit{Current \& Saving Deposits}}$$

<div align="center">

Table 4.6
NRB Balance to Current and Saving Deposit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	8.80%	5.58%	12.29%	6.98%	13.86%

</div>

(See: Appendix 4.1.6)

Table 4.6 clearly shows that the ratio remained 8.80%, 5.58%, 12.29%, 6.98%, and 13.86% respectively in different FY. The ratio of BOK shows the fluctuating trend. The standard rate of NRB balance to current and saving deposit ratio must be 8% as per the directive of NRB. The above table shows that the standard ratio cannot be maintained by BOK in the FY 062/63 & 064/65. However in remaining FY the ratio is at satisfactory level.

4.1.1.7 NRB Balance to Fixed Deposit Ratio

The ratio shows the proportion of cash balance at Nepal Rastra Bank's current account as compare to the commercial banks' fixed deposits amount. The ratio is calculated as using the following formula;

$$\text{NRB Balance to Fixed Deposit Ratio} = \frac{\text{NRB Balance}}{\textit{Fixed Deposits}}$$

<div align="center">

Table 4.7
NRB Balance to Fixed Deposit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	14.51%	12.89%	29.09%	16.37%	29.59%

</div>

(See: Appendix 4.1.6)

Table 4.7 clearly shows that the ratio remained 14.51%, 12.89%, 29.09%, 16.37%, and 29.59% respectively in different FY. The ratio of BOK shows the fluctuating trend. In all of the years, the ratio remained higher than 6%, the minimum standard set by NRB.

4.1.2 Efficiency/Activity/Turnover Ratio

Turnover ratio has been used to evaluate the efficiency with which the banks have managed and utilized their assets. So, it is also called efficiency ratio. These ratios are also employed to evaluate the speed with which assets are being converted and turnover. These ratios moreover help in measuring the bank's ability to utilize their available resources. In this study these ratios include; loans and advances to total deposit ratio, loans and advances to saving deposit ratio, loans and advances to fixed deposit ratio, investment total deposit ratio and performing assets to total assets ratio.

4.1.2.1 Loans and Advances to Total Deposit Ratio

This ratio is calculated to find out how the banks are successful utilizing the outsiders' fund i.e. total deposits for profit generating purpose in the form of extending loan and advances. It is calculated as;

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

<div align="center">

Table 4.8

Loans and Advances to Total Deposit Ratio

</div>

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	66.32%	67.92%	76.04%	79.12%	81.26%

(See: Appendix 4.2.1)

Table 4.8 clearly shows that the ratio remained 66.32%, 67.92%, 76.04%, 79.12%, and 81.26% respectively in different FY. The ratio of Loan and Advances to Total Deposit in BOK is in increasing trend throughout the study period.

4.1.2.2 Loans and Advances to Saving Deposit Ratio

Saving deposits are interest-bearing obligation for short-term purpose where as loan and advances are long-term investment for generating income. So the ratio indicates how money time's short-term interest-bearing deposits are utilized for income generating purpose. It is calculated as;

$$\text{Loan and Advances to Saving Deposit Ratio} = \frac{\text{Loans and Advances}}{\text{Saving Deposits}}$$

<div align="center">Table 4.9</div>
<div align="center">**Loans and Advances to Saving Deposit Ratio**</div>

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	1.72	1.50	1.70	1.89	2.02

(See: Appendix 4.2.2)

Table 4.9 clearly shows that the ratio remained 1.72, 1.50, 1.70, 1.89, & 2.02 respectively in different FY. The ratio of BOK is in increasing trend except in FY 062/63.

4.1.2.3 Loans and Advances to Fixed Deposits Ratio

The ratio examines that how many the funds is used in loans and advances against fixed deposits. They are interest bearing long-term obligation where as loans and advance are the major sources of investment in generating income for commercial banks. It is calculated as;

$$\text{Loans and Advances to Fixed Deposit Ratio} = \frac{\text{Loans and Advances}}{\textit{Fixed Deposits}}$$

<div align="center">Table 4.10</div>
<div align="center">**Loans and Advances to Fixed Deposit Ratio (Times)**</div>

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	2.05	2.68	3.09	3.37	3.27

(See: Appendix 4.2.3)

Table 4.10 clearly shows that the ratio remained 2.05, 2.68, 3.09, 3.37, & 3.27 respectively in different FY. The ratio of BOK is in increasing trend except in FY 065/66.

4.1.2.4 Investment to Total Deposit Ratio

Total investment includes its Government treasury bills, development bonds, other company's share and other types of investment. The ratio shows how efficiently the major sources of bank have been mobilized. It is calculated as;

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

<div align="center">Table 4.11</div>
<div align="center">**Investment to Deposit Ratio**</div>

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	29.15%	31.61%	24.23%	6.95%	5.73%

(See: Appendix 4.2.4)

Table 4.11 clearly shows that the ratio remained 29.15%, 31.61%, 24.23%, 6.95%, & 5.73% respectively in different FY. The ratio of BOK is in decreasing trend except in FY 062/63.

4.1.2.5 Performing Assets to Total Assets Ratio

Performing assets include those assets that are invested for income generating purpose. It consist loan and advances; bill purchased and discounted investment and money at call and short notice. This ratio measures what percentage of assets has been funded for income generation or it measures how efficiently the bank uses investment and economic resources at its demand. It is calculated as;

$$\text{Performing Assets to Total Assets Ratio} = \frac{\text{Performing Assets}}{\textit{Total Assets}}$$

Table 4.12
Performing Assets to Total Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	92.42%	93.40%	70.39%	80.97%	81.39%

(See: Appendix 4.2.5)

Table 4.12 clearly shows that the ratio remained 92.42%, 93.40%, 70.39%, 80.97%, & 81.39% respectively in different FY.

4.1.3 Profitability Ratios

Profit is an important factor that determines the firm's expansion & diversification. A required level of profit is necessary for the firm's growth and survives in the competitive environment. Profitability ratios have been employed to measures the operating efficiency of the sampled banks. For the purpose, return on assets, return on net worth, return on total deposit, total interest expenses to total interest income ratio and interest earned to total asset ratio have been analyzed and interpreted.

4.1.3.1 Return on Assets (ROA)
The ratio is useful in measuring the profitability of all financial resources invested the firm's assets. It is also called net profit or loss to total assets or working fund ratio and denoted by ROA. It is calculated as;

$$\text{Return on Assets} = \frac{\text{Net Profit After Tax (NPAT)}}{\textit{Total Assets}}$$

Table 4.13
Return on Assets (ROA)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	18.57%	16.06%	16.72%	20.30%	21.69%

(See: Appendix 4.3.1)

Table 4.13 clearly shows that the ratio remained 18.57%, 16.06%, 16.72%, 20.30%, & 21.69% respectively in different FY.

4.1.3.2 Return on Net Worth/Shareholders' Equity (ROSE)

The ratio is tested to see the profitability of owners' investment. It reflects the extent to which the objective of business is accomplished. The ratio is of great interest to present as prospective shareholders' and also of great significance to management, which has the responsibility maximizing the owners' welfare. It is also called net profit to shareholders equity ratio on shareholder equity simply denoted by ROSE. It is calculated as;

$$\text{Return on Net Worth} = \frac{\text{Net Profit After Tax (NPAT)}}{Net\,Worth}$$

Table 4.14
Return on Net Worth

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	18.57%	16.16%	16.76%	30.89%	28.59%

(See: Appendix 4.3.2)

Table 4.14 clearly shows that the ratio remained 18.57%, 16.16%, 16.76%, 30.89%, & 28.59% respectively in different FY. The ratio of BOK shows the fluctuating trend. This ratio indicates that BOK has effectively utilized the owner's capital and able to give regular and effective return to them.

4.1.3.3 Return on Total Deposits

The ratio shows the relation of net profit earned by bank with the total deposits accomplished. It is calculated as;

$$\text{Return on Total Deposit} = \frac{\text{Net Profit After Tax (NPAT)}}{Total\ Deposits}$$

Table 4.15
Return on Total Deposit

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	1.56%	1.81%	1.82%	2.22%	2.39%

(See: Appendix 4.3.3)

Table 4.15 exhibits that the ratios in BOK remained 1.56%, 1.81%, 1.82%, 2.22%, & 2.39% respectively in different FY. This ratio signifies that the profitability of BOK is in stronger position.

4.1.3.4 Total Interest Expenses to Total Interest Income Ratio

The ratio shows the percentage of interest expenses incurred in relation to the interest income incurred. In other words, it indicates that how much percent of interest income is used as interest paid and expressed as;

$$\text{Total Interest Expenses to Total Interest Income Ratio} = \frac{\text{Total Interest Expenses}}{\textit{Total Interest Income}}$$

Table 4.16
Total Interest Expenses to Total Interest Income Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	39.80%	42.91%	41.41%	41.21%	41.95%

(See: Appendix 4.3.4)

Table 4.16 exhibits that the ratios in BOK remained 39.80%, 42.91%, 41.41%, 41.21%, & 41.95% respectively in different FY. This ratio depicts the fluctuating trend of BOK.

4.1.3.5 Interest Earned to Total Assets Ratio

The ratio shows percentage of interest income as compared to the asset of the banks. It indicates how properly utilize the bank's assets for income generating purpose. It is computed as;

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

Table 4.17
Interest Earned to Total Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	6.16%	5.85%	5.62%	5.89%	6.74%

(See: Appendix 4.3.5)

Table 4.17 exhibits that the ratios in BOK remained 6.16%, 5.85%, 5.62%, 5.89%, & 6.74% respectively in different FY. The ratios in BOK showed the fluctuating trend. This ratio shows that BOK manage the assets more effectively to earn the interest.

4.1.4 Capital Structure/Leverage/Solvency Ratios

Leverage refers to the ratio of debt to total equity in the capital structure of the firm. Debt and equity are long-term obligation and remaining part of the liabilities side of Balance Sheet is termed as short-term obligation. Both types of structure are required in forming capital structure of firm. The appropriate mixed of all types of structure in capital structure result sound position of firm. Therefore a firm has strong short-term liabilities as well as long-term financial position.

Long-term financial position of the firm is determined by leverage or capital structure. So, leverage ratios have been analyzed and interpreted to judge the long-term financial health of the sample bank. These include debt-equity ratio, debt-assets ratio, debt to total capital ratio and interest coverage ratio.

4.1.4.1 Debt-Equity Ratio

The ratio shows the mixed of debt & equity in capital. It measures creditors' claim against owners'. It is computed as;

$$\text{Debt-Equity Ratio} = \frac{\text{Total Debt}}{Shareholder's\ Equity}$$

Table 4.18
Debt-Equity Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	12.64	13.18	13.47	11.96	10.58

(See: Appendix 4.4.1)

Table 4.18 exhibits that the ratios in BOK remained 12.64, 13.18, 13.47, 11.96, & 10.58 times in respective years of the study period. It was ranged from minimum FY 065/66 i.e. 10.58 times to maximum in FY 064/64 i.e. 13.47 times. From the above analysis we can say that BOK bank seemed levered.

4.1.4.2 Debt Assets Ratio

The ratio shows the contribution of creditors in financing the assets of the bank. It is calculated as;

$$\text{Debt Assets Ratio} = \frac{\text{Total Debt}}{Total\ Assets}$$

Table 4.19
Debt-Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	92.40%	90.22%	90.79%	93.43%	92.41%

(See: Appendix 4.4.2)

Table 4.19 depicts that the ratio for BOK remained 92.40%, 90.22%, 90.79%, 93.43%, & 92.41% respectively in different FY. The ratios in BOK are in fluctuating trend. This ratio signifies that the former followed more aggressive policy in raising the capital.

4.1.4.3 Interest Coverage Ratio

The ratio is known as time interest earned ratio is used to test the debt servicing capacity of bank. It shows the number of times the interest charged are covered by fund that ordinary available for their payment. It is calculated by dividing the EBIT by interest charged.

$$\text{Interest Coverage Ratio} = \frac{\text{Earning Before Interest \& Tax (EBIT)}}{\text{Interest Charged}}$$

Table 4.20
Interest Coverage Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	1.84	1.95	2.02	2.22	2.12

(See: Appendix 4.4.3)

Table 4.20 depicts that the ratio for BOK remained 1.84, 1.95, 2.02, 2.22, & 2.12 times in different FY.

4.1.5 Capital Adequacy Ratios

Capital adequacy ratios of the banks have been tested to find whether they are successful to measures the depositors and creditors about their soundness; and also to maintain general confidence in banking system. These include net worth to total deposit ratio, net worth to total assets and net worth to total credit ratio.

4.1.5.1 Net Worth to Total Deposits Ratio

The ratio measures the percentage of shareholders' fund in relation to the total deposits collected in the bank. It is the yardstick to see whether the bank has maintained the capital fund according to the direction of Nepal Rastra Bank. It is calculated as;

$$\text{Net Worth to Total Deposit} = \frac{\text{Net Worth}}{\text{Total Deposits}}$$

Table 4.21
Net Worth to Total Deposit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	8.40%	11.29%	10.88%	7.17%	8.39%

(See: Appendix 4.5.1)

Table 4.21 depicts that the ratio for BOK remained 8.40%, 11.29%, 10.88%, 7.17%, & 8.39% in different FY. It was highest in FY 062/63 and lowest in FY 064/65

4.1.5.2 Net Worth to Total Assets Ratio

The ratio measures the percentage of net worth in relation to the total assets owned by the banks. It is calculated as;

$$\text{Net Worth to Total Assets Ratio} = \frac{\text{Net Worth}}{\textit{Total Assets}}$$

Table 4.22
Net Worth to Total Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	7.60%	9.83%	9.23%	6.57%	7.59%

(See: Appendix 4.5.2)

Table 4.22 depicts that the ratio for BOK remained 7.60%, 9.83%, 9.23%, 6.57%, & 7.59% in different FY.

4.1.5.3 Net worth to Total Credit ratio

The ratio measures the relative portion of the shareholders fund with respect to the total credit. It is calculated as;

$$\text{Net Worth to Total Credit Ratio} = \frac{\text{Net Worth}}{\textit{Total Credit}}$$

Table 4.23
Net Worth to Total Credit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	12.11%	16.11%	13.87%	8.86%	10.12%

(See: Appendix 4.5.3)

Table 4.23 depicts that the ratio for BOK remained 12.11%, 16.11%, 13.87%, 8.86%, & 10.12% in different FY.

4.1.6 Assets Quality Ratios

Assets quality ratios intend to measures the quality of assets owned by the banks. These include loan loss coverage ratio, loan loss provision to total income ratio, loan loss provision to total deposit ratio.

4.1.6.1 Loan Loss Coverage Ratio
Nepal Rastra Bank has directed commercial banks to maintain provision for loan loss on the basis of category of loan & risk grade. The ratio therefore measures whether the provision is

sufficient to meet the possible loss created by defaulted in payment of loan or not. It is computed by dividing loan loss provision by total risk assets.

$$\text{Loan Loss Coverage Ratio} = \frac{\text{Loan Loss Provision}}{\textit{Total Risk Assets}}$$

Table 4.24
Loan Loss Coverage Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	4.36%	3.07%	3.04%	2.24%	2.00%

(See: Appendix 4.6.1)

Table 4.24 depicts that the ratio for BOK remained 4.36%, 3.07%, 3.04%, 2.24%, & 2.00% in different FY. The ratio of BOK showed the decreasing trend in comparison of FY 061/62.

4.1.6.2 Loan Loss Provision to Total Income Ratio

The ratio shows that portion of total income has been held as safety cushion against the possible bad loan. It is calculated as;

$$\text{Loan Loss Provision to Total Income Ratio} = \frac{\text{Loan Loss Provision}}{\textit{Total Income}}$$

Table 4.25
Loan Loss Provision to Total Income Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	35.66%	25.92%	29.09%	22.24%	17.81%

(See: Appendix 4.6.2)

Table 4.25 depicts that the ratio for BOK remained 35.66%, 25.92%, 29.09%, 22.24%, & 17.81% in different FY. The ratio of BOK showed the decreasing trend except in the FY 063/64.

4.1.6.3 Loan Loss Provision to Total Deposits Ratio

The ratio shows the proportion of banks income held as loan loss provision in relation to total deposits collected. It is calculated as;

$$\text{Loan Loss Provision to Total Deposits Ratio} = \frac{\text{Loan Loss Provision}}{\textit{Total Deposits}}$$

Table 4.26
Loan Loss Provision to Total Deposits Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	3.02%	2.15%	2.38%	1.81%	1.66%

(See: Appendix 4.6.3)

Table 4.26 depicts that the ratio for BOK remained 3.02%, 2.15%, 2.38%, 1.81%, & 1.66% in different FY. The ratio of BOK showed the decreasing trend.

4.1.7 Other Indicators

Above stated ratio shows light on various aspect of the banks management, investment & creditors can get information regarding their investment. Besides the above analyzed ratios, some indicators have been tested to have the boarder knowledge of financial performance of the banks. For this, EPS, P/E ratio and MVPS to BVPS have been analyzed/

4.1.7.1 Earning Per Share (EPS)

EPS refers to the income available to the common shareholder on per share basis. It is computed as;

$$\text{Earning Per Share} = \frac{\text{Earning Available to Common Shareholder (EAC)}}{\text{No. of Equity Share Outstanding}}$$

Table 4.27
Earning Per Share (EPS)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	29.99	41.80	37.28	57.85	51.24

(See: Appendix 4.7.1)

Table 4.27 depicts that the ratio for BOK remained 29.99%, 41.80%, 37.28%, 57.85%, & 51.24% in different FY. The ratio of BOK showed the fluctuating trend.

4.1.7.2 Price-Earning Ratio (P/E ratio)

P/E ratio is widely used to evaluate the banks performance as expected by investors. It represents the investor's judgment or expectation about the growth in banks earning. In other words, it measures how the market is responding toward the earning performance of the concerned banks. It is obtained as;

$$\text{Price-Earning Ratio} = \frac{\text{Market Value Per Share (MVPS)}}{\text{Earning Per Share (EPS)}}$$

Table 4.28
Price-Earning Ratio (P/E ratio)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	14.29	19.46	31.49	39.21	32.78

(See: Appendix 4.7.2)

Table 4.28 depicts that the ratio for BOK remained 14.29, 19.46, 31.49, 39.21, & 32.78 times in different FY. The P/E ratio was found in the increasing trend except the FY 065/66 i.e. 32.78

4.1.7.3 Market Value Per Share to Book Value Per Share (MVPS/BVPS)

The ratio measures the value that the financial market attaches to the management and organization of the banks as a growing concern. It is calculated as;

$$\text{Market Value Per Share to Book Value Per Share} = \frac{Market\,Value\,Per\,Share\,(MVPS)}{Book\,Value\,Per\,Share\,(BVPS)}$$

Table 4.29
Market Value Per Share to Book Value Per Share

FY	2061/62	2062/63	2063/64	2064/65	2065/66
BOK	2.77	4.69	8.45	10.56	8.85

(See: Appendix 4.7.3)

Table 4.29 depicts that the ratio for BOK remained 2.77, 4.69, 8.45, 10.56, & 8.85 respectively in different FY. The market value per share to book value per share ratio is highest in FY 064/65 and lowest in FY 061/62. The highest ratio indicates stronger management and organization in BOK.

4.2 Operating Profit/Loss Analysis

Operating profit (Loss) is the difference between total operating income and total operating expenses. If total operating income is higher than that of total operating expenses than its operating profit otherwise operating loss. If firm's profit has to examine from the point of view of all investors (both lenders' and owners'), the appropriate measure of profit is operating profit. It shows the earning gained from commercial operation of business without effect of financing. The following table shows the operating income, operating expenses and operating profit of BOK for the five years study period.

Table 4.30
Operating Profit Analysis of BOK

FY	Operating Income	Operating Expenses	Operating profits
2061/62	755560720	417869135	337691585
2062/63	885900715	514987283	370913432
2063/64	1013484137	585692505	427791632
2064/65	1281316913	731416158	549900755
2065/66	1675905613	1009402396	666503217

(See: Appendix 12)

From the above table, we can conclude that the BOK is in regular growth during the study period i.e. 2061/62 to 2065/66. It shows the increasing trend of operating profit over the period.

4.3 Correlation Analysis

Correlation coefficient is the statistical tools that can be describe to which one variable is linearly related to another the coefficient of correlation measures the degree of relationship between two sets of figures. Among the various methods of finding out coefficient of correlation, Karl Pearson's Method is applied in the study. It is the most common and useful tool to measure the relationship between two variables in the bank. The correlation coefficient(r) between two variables X and Y can be obtained by using following formula:

$$r_{xy} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

Where,
n= number of observation in series X and Y
ΣX = Sum of observations in series X
ΣY = Sum of observations in series Y
ΣX^2 = Sum of squared observations in series X
ΣY^2 = Sum of squared observations in series Y
ΣXY = Sum of the product of observations in series X and Y

Here,

r=1 implies that two variables are positively and perfectly correlated.
r=-1 implies that two variables are negatively and perfectly correlated.
r=0, does not necessarily mean that the variables are independent. They may, however be related in some other form such as quadratic, logarithm or exponential.

Under the correlation analysis, the intensity of linear relation between the following variables has been measured:

➢ Total Deposit and Loans and Advances
➢ Total Deposit and Net Profit
➢ Loans and Advances and Net Profit
➢ Performing Assets and Net Profit
➢ Total Deposit and Performing Assets
➢ EPS and MPS
➢ MPS and NWPS

4.3.1 Correlation Analysis between Total Deposits and Loans and Advances

The correlation coefficient between total deposits and loan and advances to measure the relationship between major financial sources i.e. total deposits and major component of income generating assets i.e. loans and advances. In Correlation Analysis, deposit is the independent

variable (Y) and loan and advances is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the deposits are significant used in loan and advances or not and whether there is any relationship between these two variables.

Table 4.31

Correlation Coefficient and Probable Error between Total Deposits and Loan and Advances of BOK

r_{xy}	PE(r)	6PE(r)	Condition
0.9986	0.0008	0.0048	r_{xy}>6PE(r)

(See: Appendix 4.8.1)

Table 4.31 depicts that the coefficient of correlation between the total deposits and loans and advances in BOK remained 0.9986 whereas the probable error of coefficient remained 0.0008. Correlation coefficient appeared greater than 6 times the probable error i.e. r_{xy}>6PE(r): 0.9986>0.0048. It implies that the correlation between deposits and loans and advances of the bank is highly positively correlated and significant. Loans and advances seem to rise with the rise in the volume of total deposit. Higher value of r in BOK shows better relationship as well as utilization of deposits on loans and advances.

4.3.2 Correlation Analysis between Loans and Advances and Net Profit

The basis function of commercial banks to collect deposits and used these funds on loan and advances to generate higher profit. Large amount of loan and advances generate higher profit. Correlation coefficient between loans and net profit measures the degree of relationship between loan and advances and net profit. In correlation Analysis, loans and advances is the independent variable (Y) and net profit is dependent variable (X). The purpose of computing the coefficient of correlation is to justify whether the banks loans and advances are significantly generate profit or not and whether there is any relationship between two variables. To find out the correlation (r) various calculation are done.

Table 4.32

Correlation Coefficient and Probable Error between Net Profit and Loans and Advances of BOK

r_{xy}	PE(r)	6PE(r)	Condition
0.9919	0.0048	0.0288	r_{xy}>6PE(r)

(See: Appendix 4.8.2)

Table 4.32 depicts that the coefficient of correlation between the net profit and loans and advances in BOK remained 0.9919 whereas the probable error of coefficient remained 0.0048. Correlation coefficient appeared greater than 6 times the probable error i.e. r_{xy}>6PE(r): 0.9919>0.0288. It implies that the correlation between net profit and loans and advances of the bank highly positively correlated and significant.

4.3.3 Correlation Analysis between Performing Assets and Net Profit

Commercial banks being service-oriented organization do not produce physical goods. They produce loan and advance and innovation and sell same to generate profit. Correlation coefficient between performing assets and net profit measures the degree of relationship between performing assets and net profit. In Correlation Analysis, performing assets is the independent variable (Y) and net profit is dependent variable (X). The purpose of computing the coefficient of correlation is justify whether the banks performing assets are significantly generate profit or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculations are done.

Table 4.33

Correlation Coefficient and Probable Error between Performing Assets and Net Profit of BOK

r_{xy}	PE(r)	6PE(r)	Condition
0.9701	0.0177	0.1062	r_{xy}>6PE(r)

(See: Appendix 4.8.3)

Table 4.33 depicts that the coefficient of correlation between the performing assets and net profit in BOK remained 0.9701 whereas the probable error of coefficient remained 0.0177. Correlation coefficient appeared greater than 6 times the probable error i.e. r_{xy}>6PE(r): 0.9701>0.1062. It implies that the correlation between performing assets and net profit of the bank is highly positively correlated and significant.

4.3.4 Correlation Analysis between Total Deposit and Performing Assets

The correlation coefficient between total deposits and performing assets to measures the relationship between major financial sources i.e. total deposits and major component of total assets i.e. loans and advances. In Correlation Analysis, deposit is the independent variable (Y) and performing asset is dependent variable (X). The purpose of computing the coefficient of correlation is justify whether the deposits are significant used in performing assets or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculations are done.

Table 4.34

Correlation Coefficient and Probable Error between Total Deposits and Performing Assets

r_{xy}	PE(r)	6PE(r)	Condition
0.9495	0.0296	0.1779	r_{xy}>6PE(r)

(See: Appendix 4.8.4)

Table 4.34 depicts that the coefficient of correlation between the total deposits and performing assets in BOK remained 0.9495 whereas the probable error of coefficient remained 0.0296. Correlation coefficient appeared greater than 6 times the probable error i.e. r_{xy}>6PE(r): 0.9495>0.1779. It implies that the correlation between total deposits and performing assets of the bank is highly positively correlated and significant.

4.3.5 Correlation Analysis between EPS and MVPS

Correlation coefficient between MVPS and EPS measures the degree of the relationship between two variables. In Correlation Analysis, EPS is the independent variable (Y) and MVPS is dependent variable (X). The purpose of computing the coefficient of correlation is justify whether the MVPS significantly relation in EPS or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculations are done.

Table 4.35

Correlation Coefficient and Probable Error between EPS and MVPS

r_{xy}	PE(r)	6PE(r)	Condition
0.8147	0.1013	0.6078	r_{xy}>6PE(r)

(See: Appendix 4.8.5)

Table 4.35 depicts that the coefficient of correlation between EPS and MVPS in BOK remained 0.8147 whereas the probable error of coefficient remained 0.1013. Correlation coefficient appeared greater than 6 times the probable error i.e. r_{xy}>6PE(r): 0.8147>0.6078. It implies that the correlation between EPS and MVPS of the bank is highly positively correlated and significant.

4.3.6 Correlation Analysis between MPS and NWPS

Correlation coefficient between MPS and NWPS measures the degree of the relationship between Market Value Per Share and Book Value Per Share or Net Worth Per Share. The purpose of computing the coefficient of correlation is to justify whether the MPS significantly relation in NWPS or not and whether there is any relationship between these two variables. To find out the correlation (r) various calculations are done.

Table 4.36

Correlation Coefficient and Probable Error between EPS and NWPS

r_{xy}	PE(r)	6PE(r)	Condition
0.7436	0.1346	0.8076	r_{xy}<6PE(r)

(See: Appendix 4.8.6)

Table 4.36 depicts that the coefficient of correlation between EPS and NWPS in BOK remained 0.7436 whereas the probable error of coefficient remained 0.1346. Correlation coefficient appeared greater than 6 times the probable error i.e. r_{xy}>6PE(r): 0.7436>0.8076. It implies that the correlation between EPS and NWPS of the bank is highly negatively correlated and significant.

4.4 Trend Analysis

Trend analysis is very useful to predict the future events on the basis of the past tendencies. This method is based on the assumption that past tendency continues in the future. The future trends of any variable is forecasted using the equation, Y_c=a+bX

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Where,

Y_c=the dependent variable

a=Y-intercept

b=the slope of the trend line

X=Year -2063/64 (with regard to the data used in the study)

The normal equations on fitting the trend equation are:

$$\Sigma Y = Na + b\Sigma X$$

$$\Sigma XY = a\Sigma X + b\Sigma X^2$$

Since, $\Sigma X = 0$

$$a = \frac{\Sigma Y}{N}, b = \frac{\Sigma XY}{\Sigma X^2}$$

With the help of the trend equation, future values of the following variables for coming five years have been predicted:

➢ Total Deposits
➢ Net Profit
➢ Net Worth
➢ Loans and Advances
➢ Performing Assets

4.4.1 Trend Analysis of Total Deposits

Table 4.37

Least Square Trend Equation and its Determinant of Total Deposits (in Million)

a	b	Y_c=a+bX
13146.33	2327.64	13146.33+2327.64X

(Appendix: 4.9.1)

Table 4.37 depicts that 'a' i.e. y-intercept and 'b' i.e. slope of the trend line of the total deposits in BOK remained Rs.13146.33 and Rs.2327.64 respectively. Throughout the review period total deposit showed increasing trend. On the average, total deposit increased by Rs. 2327.64 per year through the study period. Therefore, trend equation of total deposit is Y_c=13146.32+2327.64X. On the basis of trend equation, the forecasted value of the total deposit for FY 66/67, 67/68, 68/69, 69/70, & 70/71 would be Rs. 20129.24, 22456.88, 24784.52, 27112.16, & 29439.80 respectively in millions.
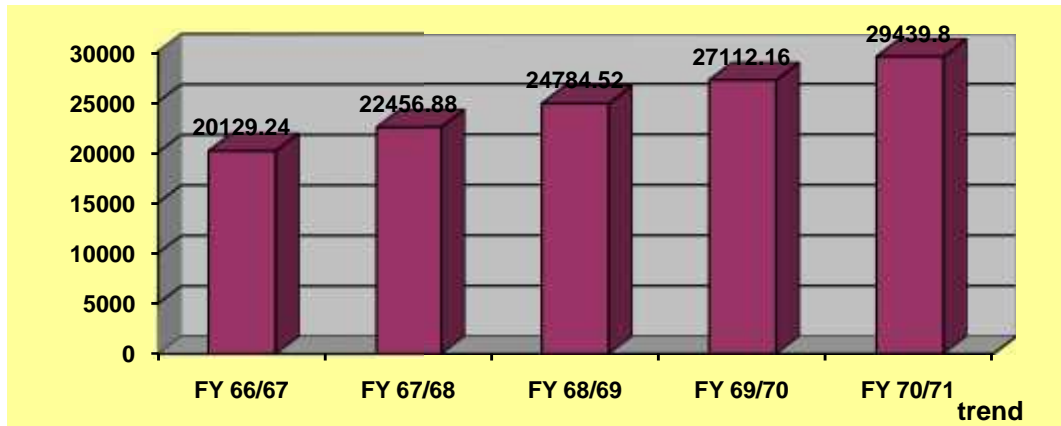
Fig: 4.37

4.4.2 Trend Analysis of Net Profit

Table 4.38

Least Square Trend Equation and its Determinant of Loans and Advances (in Million)

a	b	$Y_c=a+bX$
267.81	74.82	267.81+74.82X

(Appendix: 4.9.2)

Table 4.38 depicts that 'a' i.e. y-intercept and 'b' i.e. slope of the trend line of the loans and advances in BOK remained Rs. 267.81 and Rs. 74.82 respectively. Throughout the review period loan and advances showed increasing trend. On the average, loan and advances increased by Rs. 74.82 per year through the study period. Therefore, trend equation of total deposit is $Y_c=267.81+74.82X$. On the basis of trend equation, the forecasted value of the total deposit for FY 66/67, 67/68, 68/69, 69/70, & 70/71 would be Rs. 490.41, 564.61, 638.81, 713.01, & 787.21 respectively in millions.
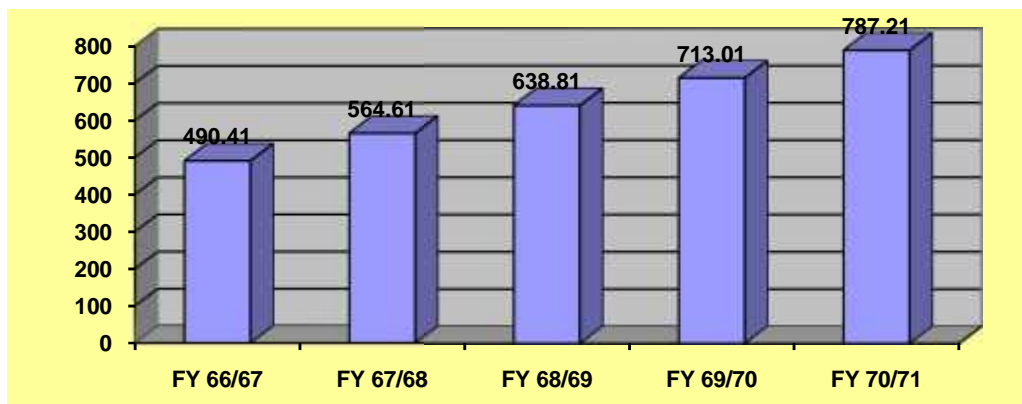
Fig: 4.38

4.4.3 Trend Analysis of Net Worth

Table 4.39

Least Square Trend Equation and its Determinant of net worth (in Million)

a	b	$Y_c=a+bX$
1186.10	145.72	1186.10+145.72X

(Appendix: 4.9.3)

Table 4.39 depicts that 'a' i.e. y-intercept and 'b' i.e. slope of the trend line of the loans and advances in BOK remained Rs. 1186.10 and Rs. 145.72 respectively. Throughout the review period loan and advances showed increasing trend. On the average, loan and advances increased by Rs. 145.72 per year through the study period. Therefore, trend equation of total deposit is Y_c=1186.10+145.72X. On the basis of trend equation, the forecasted value of the total deposit for FY 66/67, 67/68, 68/69, 69/70, & 70/71 would be Rs. 1623.26, 1768.98, 1914.70, 2060.42, & 2206.14 respectively in millions.
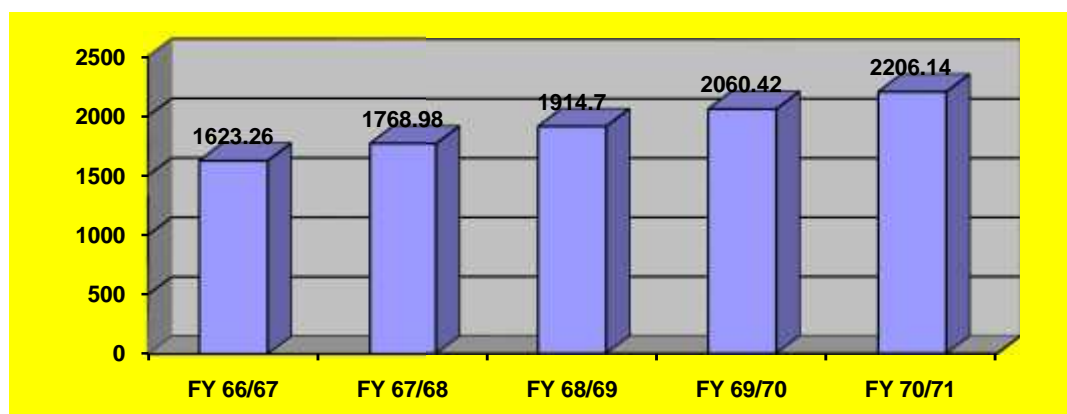
Fig: 4.39

4.4.4 Trend Analysis of Loans and Advances

Table 4.40

Least Square Trend Equation and its Determinant of Loans and Advances (in Million)

a	b	$Y_c=a+bX$
9936.90	2267.29	9936.90+2267.29X

(Appendix: 4.9.4)

Table 4.40 depicts that 'a' i.e. y-intercept and 'b' i.e. slope of the trend line of the loans and advances in BOK remained Rs. 9936.90 and Rs. 2267.29 respectively. Throughout the review period loan and advances showed increasing trend. On the average, loan and advances increased by Rs. 2267.29 per year through the study period. Therefore, trend equation of total deposit is Y_c=9936.90+2267.29X. On the basis of trend equation, the forecasted value of the total deposit for FY 66/67, 67/68, 68/69, 69/70, & 70/71 would be Rs.16738.05, 19005.34, 21272.63, 23539.92, and 25807.21 respectively in millions.
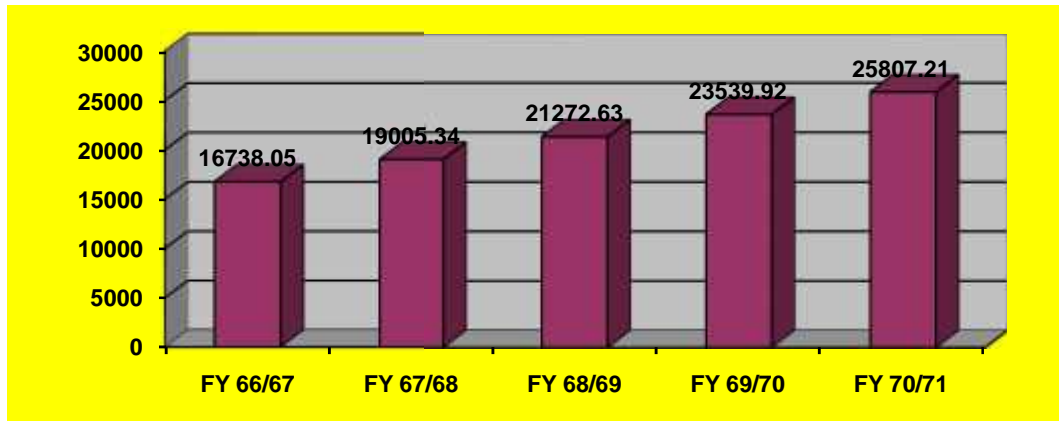
Fig: 4.40

4.4.5 Trend Analysis of Performing Assets

Table 4.41

Least Square Trend Equation and its Determinant of Performing Assets

a	b	$Y_c=a+bX$
11811.73	1667.67	11811.73+1667.67 X

(Appendix: 4.9.5)

Table 4.41 depicts that 'a' i.e. y-intercept and 'b' i.e. slope of the trend line of the loans and advances in BOK remained Rs. 11811.73 and Rs. 1667.67 respectively. Throughout the review period loan and advances showed increasing trend. On the average, loan and advances increased by Rs. 1667.67 per year through the study period. Therefore, trend equation of total deposit is $Y_c=11811.73+1667.67$ X. On the basis of trend equation, the forecasted value of the total deposit for FY 66/67, 67/68, 68/69, 69/70, & 70/71 would be Rs. 16814.74, 18482.41, 20150.08, 21817.75, and 23485.42 respectively in millions.
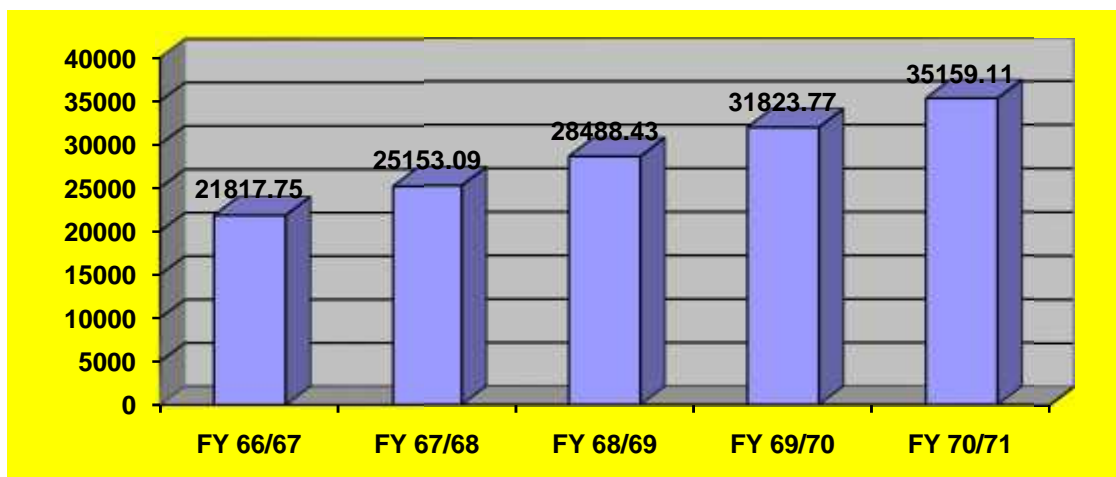
Fig: 4.41

CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Banks are such type of financial institutions that deal with money by accepting various types of deposits disburse loans and render other financial services. They deal with credit and credit instrument and gain confidence and trust of people to create credit. They can define as financial departmental store, which render a host of financial services besides taking deposits and giving loans.

Every country in the world developed or underdeveloped is in pursuit of attaining the goal of rapid economic development in the same way or other depending upon the prevailing prospectus and nature of instrument for economic growth. In this context, commercial banks play the role of financial intermediary collecting the fund from surplus unit (i.e. Investors). The structure of modern economy will be no better than ancient period of better system without financial intermediacies. Therefore, commercial banks play an important role in boosting the national economy. They play the vital role in the affairs of the economy in various ways. Their operation records the economic pulse of the economy. They have played an important role in giving a direction to economy's development over time by financing the requirement of trade and industry in the country. It should not be forgotten that the country can hardly achieve its goal of economic development without strong capital base and commercial banks have pivotal role in forming such base.

Financial performance as part of the financial management in the main indicators of the success or failure of the firm (i.e. Banks) so, the financial performance analysis can be considered as the heart of financial decision the growth and development of the firm is directly influences by the financial policies of their firm. There are different persons/institutions that are affected by the financial decision of the firm, stakeholder such as owners, managers, creditors, tax authorities etc are directly interrelated in the final information analysis of the bank's position.

In the financial sectors there are various commercial banks established as joint venture. After implementation of open market policy the joint venture commercial banks are operated as private banks. As of FY 2063/64 private sectors banks are more than 250 branches across different parts of country. Private sector banks have already made their presences felt in all the development regions of expansion with establishment of the private sector banks in the country, economic activities have made remarkable progress with in these two decades. They have played significant role in economic development of the country. They have introduced new technology in the banking system mobilized the saving of community. They have focused their services on commerce trade industry along with general public. But the intense competition and lack of sufficient investment opportunities have create threat to the banks. Bank of Katmandu Limited is a private sector commercial bank, which is opened as joint venture and Nepalese entrepreneur. Now, it comes fully under Nepalese ownership & management team.

Therefore, the study has been conducted to evaluate the financial performance of BOK, to find out its strength and weakness. The main objective of the study is an analysis of financial performance of the private sectors commercial banks which are fully managed and ownership of Nepalese entrepreneur i.e. BOK. To fulfill this objective an other specific objectives as described in chapter I, and appropriate research methodology has been adopted which includes financial tools- ratio analysis, income and expenditure analysis, correlation coefficient, trend analysis have been used. The major study consists of liquidity, turnover, profitability, capital structure, capital adequacy, and assets quality position. In order to test the relationship between various components of financial indicates, Karl Pearson's correlation coefficient 'r' is calculated and analyzed.

The necessary data are derived from the balance sheet and profit and loss account of BOK for the period of 5 years from FY 2061/62 to FY 2065/66. Chapter V includes the summary of major findings, conclusions and recommendations.

5.1 Major Findings
Major findings of this study during the period of 5 years in BOK from the analysis are summarizes as:

5.1.1 Summary of ratio analysis
Ratio analysis is one of the important financial tools to analyze the financial performance. The study mainly focused on the ratio analysis. For the analysis purpose the researcher classified the seven groups and out of seven groups thirty sub- groups are derived.

5.1.1.1Liquidity Ratio
From the analysis of liquidity ratios the following findings can be presented:

i) After studying the current ratio of BOK, during the study period it revealed that the highest ratio is 1.65 times in FY 2061/62 and the lowest ratio is 1.28 times in FY 2064/65.

ii) The highest and lowest quick ratio of BOK is 0.52 in FY 2061/62 and 0.25 in FY 2064/65 which shows the decreasing trend respectively.

iii) The highest and lowest ratio of cash and bank balance to current assets ratio of BOK is 9.77% and 5.75% in FY 2063/64 and FY 2064/65, which shows the fluctuating trend respectively.

iv) The highest and lowest ratio of cash and bank balance to short term deposit ratio of BOK is 14.11% and 7.51% in FY 2063/64 and FY 2064/65, which depicts the fluctuating trend respectively.

v) As per the analysis of cash and bank balance to total deposit ratio of BOK is in fluctuating trend during the 5 years periods i.e. FY 2061/62 to FY 2065/66 is 8.31%, 6.82%, 10.64%, 5.74%, and 8.97% respectively.

vi) As per the analysis of NRB balance to current and saving deposits ratio of BOK is in fluctuating trend during the 5 years periods i.e. FY 2061/62 to FY 2065/66 is 8.80%, 5.58%, 12.29%, 6.98%, and 13.86% respectively.

vii) As per the analysis of NRB balance to fixed deposit ratio of BOK is in fluctuating trend during the 5 years periods i.e. FY 2061/62 to FY 2065/66 is 14.51%, 12.89%, 29.09%, 16.37%, and 29.59% respectively.

5.1.1.2 Activity ratio
From the analysis of various activity ratios, the following findings are categorized:
i) After the study of loans and advances to total deposits ratio of BOK have increasing trend in different five years. During the study period, the highest and lowest ratio is 81.26% and 66.32% in the FY 2065/66 and FY 2061/62 respectively.

ii) As per the analysis of loans and advances to saving deposits ratio of BOK is in increasing trend except FY 2062/63. The highest and lowest ratio is 2.02 times and 1.50 in FY 2065/66 and FY 2062/63 respectively.

iii) As per the analysis of loans and advances to fixed deposit ratio of BOK is in increasing trend except 2065/66 during the study period. The highest and lowest ratio is 3.37 times and 2.05 times in FY 2064/65 and FY 2061/62 respectively.

iv) As per the analysis of investment to total deposit ratio of BOK is in decreasing trend except 2062/63 during the study period. The highest and lowest ratio is 31.61% and 5.73% in FY 2062/63 and FY 2065/66 respectively.

v) As per the analysis of performing assets to total assets ratio of BOK is in fluctuating trend during the study period. The highest and lowest ratios are 93.40% & 70.39% in FY 2062/63 and 2063/64 respectively.

5.1.1.3 Profitability ratio
From the analysis of various profitability ratios, the following findings can be categorized:
i) After the study of return on total assets ratio, the bank have increasing trend during the five years period i.e. FY 063/64, 064/65, 065/66 is 16.72%, 20.30%, & 21.69% respectively except in FY 062/63 i.e. 16.06%.

ii) After studying the return on net worth/shareholder's equity or ROSE ratio of BOK, during the study period ratio is in fluctuating trend. The ratio ranges from 30.89% to 16.16% which lies on the FY 2064/65 and 2062/63 respectively.

iii) According to the study, return on total deposit ratio of BOK have increasing trend like 1.56%, 1.81%, 1.82%, 2.22%, and 2.39% during the study period. Thus it can be concluded that BOK return on total deposit is effective.

iv) As per the analysis of interest expenses to interest income ratio of BOK is in fluctuating trend during the five years period. The highest ratio is 43.08% in FY 2063/64 whereas the lowest ratio is 39.80% in FY 2061/62.

v) As per the analysis of interest earned to total assets ratio of BOK is in fluctuating trend during the five years period. The highest ratio is 6.74% in FY 2065/66 whereas the lowest ratio is 5.40% in FY 2063/64.

5.1.1.4 Leverage ratio
From the analysis of various leverage ratios, the following findings can be categorized:

i) After studying the debt- equity ratio the bank have increasing trend during the study period i.e. FY 2061/62 to 2063/64 then after decreasing trend.

ii) After studying the debt-assets ratio of BOK, during the study period is in fluctuating trend. The ratio ranges from 93.43% to 90.22% which lies from FY 2064/65 to FY 2062/63.

iii) As per the analysis of interest-coverage ratio of BOK is in increasing trend except in FY 2065/66 during the five years period. The highest ratio is 2.22 times in FY 2064/65 whereas the lowest ratio is 1.84 times in FY 2061/62.

iv) As per the analysis of long term debt to net worth ratio of BOK is in fluctuating trend during the five years period. The highest ratio is 3.85 times in FY 2061/62 whereas the lowest ratio is 2.72 times in FY 2062/63.

5.1.1.5 Capital adequacy ratio
 From the analysis of various capital adequacy ratios, the following findings can be categorized:
i) As per the analysis of net worth to total deposits ratio of BOK is in fluctuating trend during the five years period. During the study period in FY 2061/2062 to FY 2065/66 ratio is 8.40%, 11.29%, 10.88%, 7.17%, and 8.39% respectively.

ii) As per the analysis of net worth to total assets ratio of BOK is in fluctuating trend during the five years period. During the study period in FY 2061/2062 to FY 2065/66 ratio is 7.60%, 9.83%, 9.23%, 6.57%, and 7.59% respectively.

iii) According to the study, return on net worth to total credit ratio of BOK have fluctuating trend like 12.11%, 16.11%, 13.87%, 8.86%, and 10.12% during the FY 2061/62 to 2065/66 respectively.

5.1.1.6 Assets quality ratio

From the analysis of various assets quality ratio, the following findings can be categorized:

i) According to the study, loan loss coverage ratio of BOK have decreasing trend like 4.36%, 3.07%, 3.04%, 2.24% and 2.00% during the FY 2061/62 to 2065/66 respectively.

ii) According to the study, loan loss provision to total income ratio of BOK have decreasing trend like 35.66%, 25.92%, 29.09%, 22.24% and 17.81% during the FY 2061/62 to 2065/66 respectively.

iii) According to the study, loan loss provision to total deposits ratio of BOK have decreasing trend like 3.02%, 2.15%, 2.38%, 1.81% and 1.66% during the FY 2061/62 to 2065/66 respectively.

5.1.1.7 Other indictors

From the analysis of other indicators, the following findings can be categorized:

i) As per the analysis of EPS of BOK during the five years period, the EPS is found in fluctuating trend like as 29.99, 41.80, 37.28, 57.85, and 51.24.

ii) The P/E ratio of BOK is found in increasing trend except the FY 2065/66. The highest and lowest ratio ranges from 39.21 times to 14.29.

iii) As per the analysis of market value per share to book value per share ratio of BOK is in increasing trend. The highest and lowest ratio ranges from 10.56 times in FY 2064/65 and 2.01 times in FY 2061/62.

5.1.2 Summary of Operating Profit/Loss analysis
From the analysis of operating income and operating expenditure of BOK, we can conclude that the operating profit of BOK is in increasing trend in different FY. The operating profit of BOK is Rs. 337691585, 370913432, 427791632, 549900755, & 666503217 in FY 061/62 to 065/66 respectively.

5.1.3 Summary of Correlation Analysis
Coefficient of correlation analysis between different variables reveals that:

i) From the analysis of correlation between total deposits and loan and advances of BOK 'r' is 0.9986, which shows higher positive correlation between these two variables.

ii) From the analysis of correlation between net profit and loan and advances of BOK 'r' is 0.9919, which shows higher positive correlation between these two variables.

iii) From the analysis of correlation between performing assets & net profit of BOK 'r' is 0.9701, which shows higher positive correlation between these two variables.

iv) From the analysis of correlation between total deposit and performing assets of BOK 'r' is 0.9495, which shows higher positive correlation between these two variables.

v) From the analysis of correlation between EPS and MVPS of BOK 'r' is 0.8147, which shows higher positive correlation between these two variables.

vi) From the analysis of correlation between EPS and NWPS of BOK 'r' is 0.7436, which shows higher positive correlation between these two variables.

5.1.4 Trend analysis
In trend analysis, least square trend analysis is analyzed by calculating the parameters 'a' and 'b'. Total deposits, net profit, net worth, loans and advances, performing assets shows the increasing trend in BOK.

i) On the basis of trend analysis of total deposits, it can be concluded that 'a' (y-intercept) and 'b' (slope of trend line) of total deposits in BOK appeared Rs.13146.33 and 2327.64 millions respectively during the study period.
Where, trend equation of total deposits is $Y_c = 13146.33 + 2327.64X$

ii) After the study of trend analysis of net profit, the value of 'a' and 'b' of net profit of BOK is Rs.267.81 and 74.21 millions respectively during the study period.
Thus, trend equation of net profit is $Y_c = 267.81 + 74.21X$

iii) After the study of trend analysis of net worth, the value of 'a' and 'b' of net profit of BOK is Rs.1186.10 and 145.72 millions respectively during the study period.
Thus, trend equation of net worth is $Y_c = 1186.10 + 145.72X$

iv) After the study of trend analysis of loans and advances, the value of 'a' and 'b' of net profit of BOK is Rs. 9936.90 and 2267.29 millions respectively during the study period.
Thus, trend equation of loans and advances is $Y_c = 9936.90 + 2267.29X$

v) After the study of trend analysis of performing assets, the value of 'a' and 'b' of net profit of BOK is Rs. 11811.73 and 1667.67 millions respectively during the study period.
Thus, trend equation of performing assets is $Y_c = 11811.73 + 1667.67X$

5.2 Conclusions

After analyzing the data in chapter IV, the researcher reaches the conclusion that the financial performance of BOK is improved year by year after the foreign partner withdraw its share and new Nepalese entrepreneur. In other words, private sector bank which are under Nepalese management are being run as efficiently as under the foreigner banks which have never restored to taking help of foreign hand are also seen to doing well.

Current ratio is below the normal standard however we can not conclude the liquidity position is poor as it is only quantitative measures not qualitative and the situation of the bank is quite different than that of general business enterprise. The standard quick ratio is 1:1 i.e. quick assets must be equal to current liabilities. This ratio indicates that BOK has very weak position of immediate payment of short term obligation because current liabilities were greater than that of quick assets. Cash and bank balance can have negative impact on the good will and reputation of the bank. But in other aspects this ratio is better as it indicates the ability to manage the deposit withdraws from the customer.

Cash and bank balance to total deposit ratio of bank indicates its high ability but very high ratio shows the inefficiency of the bank so, bank will keep a certain percentage of deposits in the form of cash for its contingent reasons. As per directive of Nepal Rastra Bank the required NRB Balance to current and saving deposit ratio must be 8%, BOK improve this standard on FY's 2061/62, 2063/64, 2065/66. From this point of view BOK is in satisfactory position.

Loan and advances to total deposit ratio depicts that the bank is successfully utilizing its resources in profit generating field so it will be better for BOK to increase the portion of loan and advances to earn more interest. Loan and advances to saving deposit indicates how many times short term interest bearing deposits are utilized for BOK's income generating purpose. Loan and advances to fixed deposit ratio are the major sources of investments in generating income for commercial bank. The bank has better utilization of loan and advances for generating income.

Total investment to total deposit ratio of bank has more successfully allocated its deposits in investment portfolio. It shows bank has normal and increased position to utilize its total deposits as investment. Performing assets to total assets ratio depicts that what percentage of assets has been funded for income generation or it measures how efficiently the bank uses investment and economic resources as its demand. Return on total assets ratio is useful in measuring the profitability of all financial resources invested the firms assets. BOK shows satisfactory level of profitability on total assets. Return on net worth/shareholder's equity ratio show the profitability of owner's investment. This ratio has the responsibility of maximizing the owner's welfare. BOK has shown satisfactory level of profitability towards the owner's.

Return on total deposit ratio show the relation of net profit earned by bank with the total deposits accomplished. Thus, BOK has shown the effective return on total deposits. Total interest expenses to total interest income ratio indicates that how much percent of interest income is used as interest paid. BOK has shown the satisfactory position return on total interest income. Interest earned to total assets ratio of BOK shows satisfactory interest income as compared to the assets of the bank. BOK has shown satisfactory position of debt and equity in capital.

The higher debt-assets ratio of BOK indicates that the greater portion of the bank assets has been financed through outsider's fund. BOK has shown good debt servicing capacity of bank. Net worth to total deposit ratio of BOK depicts that the percentage of shareholder's fund in relation to the total deposit collected in the bank is satisfactory. Net worth to total assets ratio of BOK depicts that the percentage of net worth in relation to the total assets earned by the bank is satisfactory. Net worth to total credit ratio of BOK depicts that the relative portion of the shareholder's fund with respect to the total credit is satisfactory. BOK loan loss coverage ratio is in decreasing trend which implies that the bank can prevent itself from possible default in payment by borrowers. Loan loss provision to total income ratio of BOK shows that portion of total income has been held as safety cushion against the possible bad loan.

Loan loss provision to total deposit ratio of BOK shows that the proportion of bank income held as loan loss provision in relation to deposit collected is decreasing. EPS of BOK shows that at the end of five years study period is slightly decrease than fourth year which indicates the bank future will be satisfactory position. P/E ratio of BOK is found in satisfactory position. MVPS/BVPS of BOK indicates that the financial market attaches to the management and organization of the banks as a increasing trend.

We can conclude that the BOK is in regular growth during the study period i.e. 2061/62 to 2065/66. It shows the increasing trend of operating profit over the period.

There highly positively relation between total deposits and loan and advances, net profit and loan and advances, performing assets and net profit, total deposit and performing assets, EPS and MVPS, & EPS and NWPS in BOK bank. So, the main financial indicator shows the positive trend in BOK.

➢ Trend analysis of total deposit, net profit, net worth, loan and advances, & performing assets of BOK is in increasing trend through the study and forecasting for next five year period, which indicates that the position of BOK is satisfactory.

5.3 Recommendations

A clear financial picture of BOK can be viewed from all above presentation. Now, some valuable and timely suggestions and recommendations can be advance to overcome weakness, inefficiency, & to improve present financial position of the bank. On the basis of findings mentioned above some of recommendations have been drawn as follows:

1. BOK could not maintain the conventional standard of liquidity and quick ratio. It indicates the poor liquidity position of the bank. So, BOK is recommended to maintain the adequate net working capital.
2. BOK has maintained NRB balance to total deposit ratio remarkable higher than the standard prescribed by NRB. The fund tide in NRB cannot yield a good return. So BOK is suggested to lower this ratio and invest the surplus fund in other current assets such as loan and advances, bill purchase discounts, and money at call and short notice.
3. Efficiency/turnover ratio of BOK seems in satisfactory position. So, BOK has to allocate the deposits in income generating sectors. It will be better for BOK bank to open the branches in other cities and rural areas in order to find the profitable opportunities.
4. Profitability ratio of BOK seems in satisfactory position by analyzing the increasing trend on the return on assets, ROSE, return on total deposits, total interest expenses to total interest income, and interest earned to total assets ratio. The above analysis depicts the growth of BOK.
5. Capital structure ratio of BOK shows the satisfactory level of utilization of short term as well as long term liabilities for the sound position of the bank.
6. Capital adequacy ratio of BOK seems at satisfactory level. So BOK is recommended to raise its net worth. It will be better for the bank to distribute the stock dividend rather than cash dividend.
7. Assets quality ratio of BOK seems in satisfactory level. The bank has employed a considerably greater portion of debt in their capital. Therefore, BOK should be aware of possible risk that may arise due to the slackness in the business activities. In this regard BOK should adopt suitable measures so as to check the risk factor. BOK is recommended not to lend greater portion of its loan in riskier sector.
8. P/E ratio of BOK is seems in satisfactory position. From this analysis, BOK is recommended to expand its areas. In other words the expectation or judgments of the investors about the growth in bank earning is good.
9. The operating profit of BOK is in increasing trend, which depicts the better performance of bank. So to achieve operating profit BOK is recommended to increase the operating income and cut down the unnecessary expenses by using modern banking technology, computer networking, and experts and well trained personnel.
10. Relation between different variables such as net profit and loan and advances, performing assets and net profit, and total deposit and loan and advances etc. are highly positive in BOK So, BOK is recommended to invest its fund in the secured and profitable sector, which generates high profit.

11. Introducing the latest and sophisticated banking system, developing the high motivational strength in management and increasing turnover etc. are some of techniques to improve and increase the gap between income and expenses.
12. The bank must collect more funds from current deposits, compared to other interest bearing deposits. The bank must located and explore new technique and facilities for collection.
13. There should be continuous flow of financial information among various groups of employees. The goal and objective of banks should be carefully communicated to lower level of management.
14. A systematic approach of financial performance analysis should be made annually. This would considerably contribute to increase the financial strength of bank. The bank should have debt analysis of its financial strength and weakness. It should try to come out its weakness by using its different aspects.

The financial performance of BOK is at satisfactory level. The best is yet to come.

Bibliography

Books

Agrawal, R.D (1989). *Financial Accounting*, New Delhi: Tata McGraw Hill Publishing Company Limited.

Dahal, Sarita, and Bhuwan (2002). *A Hand Book of Banking*, Kathmandu: Asmita Books and Stationary.

Hampton, J.J (1998). *Financial Decision Making*, New Delhi: Prentice Hall of India Pvt. Ltd.

Helfert, E.A (1992). *Techniques of Financial Analysis*, Bombay: Jaico Publishing House.

Jain, S.P, and Narang K.L (1989). *Financial Management Accounting*, Calcutta: Kalyani Publishers.

Kerlinger, Fred N. (1983). *Fundamental Behavior Research,* New Delhi: Surjeet Publishers.

Needles, B.E (1989). *Financial Accounting Boston*: Houghton Miffin Company.

Ojha, D.C and Rajbahak, R.P (1968) *Banking and Modern Currency in Nepal,* Kathmandu: Education Enterprises.

Pandey, I.M (1994). *Financial Management,* New Delhi: Vikash Publishing House.

Pradhan, R.S.(1986). *Public Corporation of Nepal,* New Delhi: National Bank Organization.

Richard, I. Levin, and David, S. Rudin (1991). *Statistical for Management,* New Delhi: Prentice Hall of India Pvt. Ltd.

Srivatav,R.M (1993). *Financial Management,* Meerut: Pragati Parkashan.

Vashi, M.C (1978). *Modern Banking,* New Delhi: Laxmi Publication.

Vanhorn, J.C. (1999). *Financial Management and policy,* New Delhi: Prentice Hall of India Pvt. Ltd.

Vanhorn, J.C, Wanchowicz, J.M (1997). *Fundamentals of Financial Management,* New Delhi: Prentice Hall of India Pvt. Ltd.

Western, J.F., Copland, T.E (1992). *Financial Management (Ninth Edition),* Chicago: Dryden press, Harcourt Brace College Publisher.

Wolff, H.K, pant, P.R. (1999). *A Handbook For Social Science Research and Thesis Writing*, Kathmandu: Buddha Academic Enterprises Pvt. Ltd.

Articles

Bhandari, Anup (2061). *Commercial Banks in Nepal at a Glimpse,* Business Age International, Vol. 7 No. 3 (Feb) Pp 29

Gorkhapatra Nov 11, 2007

Paudel, N.P. (2053). *Financial Statement Analysis*: An Approach to Evaluate Bank's Performance. NRB Samachar.

Shakya, Guna Ratna (2004). *The Sequences of Banking Development in Nepal*, Nepal Bank Patrika (Baishak) Pp 40

Sharma, Gopal (2004). *An Analysis: Two Decades of Private Sector Bank in Nepal*, The Business Age Vol. No. 3 187 (June-July) Pp 40-42

Sherstha, Monohar K (1992). *Commercial Banks Comparative Performance Evaluation*, Kathmandu: Karmachari Sanchaya Kosh.

Shrestha, Prithivi M (2004). *Foreign VS Nepal Management in Nepalese Banks,* The Business Age Vol. 06 No. 03 (March) Pp 35-44.

Staff Reporters (2007). *Commercial Banks: A Traditional in Pleasing Clients*. Business Age International, Vol. 7, No. 3 (Nov) Pp 22-23.

Unpublished Master's Theses

Acharya, Gayanendra (1997). *A Study on Comparative Financial Performance of Joint Venture Banks in Nepal: Especially on NABIL and NIBL.* Unpublished Master's Degree Thesis T.U. Kathmandu.

Adhikari, Dev Raj (1993). *Evaluating the Financial Performance of Nepal Bank Limited*, Unpublished Master's Degree Thesis T.U. Kathmandu (April)

Amatya, Nagendra Bahadur (1993). *An Appraisal of Financial Position of Nepal Bank Limited,* Unpublished Master's Degree Thesis, Faculty of Management T.U. Kathmandu

Bhattari, Ramala (1987). *Comparative Study of Financial Performance of NABIL and NIBL,* Unpublished Master's Degree Thesis T.U. Kathmandu

Hiralal, Prasad (1999). *A Comparative Study of Financial Performance of NBL and NGBL*, Unpublished Master's Degree Thesis T.U. Kathmandu

Joshi, Keshav Raj (1989). *A Study of Financial Performance of Commercial Bank,* Unpublished Master's Degree Thesis T.U. Kathmandu

Joshi, Nirmala (1994). *Criteria for Evaluating the Financial Performance of Commercial Banks in Nepal,* Unpublished Master's Degree Dissertation Submitted to Faculty of Management T.U. Kathmandu

Appendix A

Appendix 1
Calculation of Current Assets of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Cash & Bank Balance	740520482	728697092	1315903944	903719800	1617045947
Investment & GON. Securities	2146619488	2658369057	2332041251	2113223115	1744976571
Money at call & short notice	328873857	594047379	259278628	72679836	243351500
Total Quick Assets	**3216013827**	**3988883528**	**3907223820**	**3089622751**	**3605374018**
Loan & Advances(with Bills)Net	5912579471	7259082579	9399327617	12462637541	14647296987
Other Current Assets	1128649911	172589947	157056340	154364018	222606007
Total Current Assets	**10257243209**	**1141278604**	**13463607773**	**15706624310**	**18475277012**

Source: Five year annual report of BOK

Appendix 2
Calculation of Cash and Bank Balance of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
National Currency (with coins)	150615057	171213165	197994476	516222730	503639904
Foreign Currency	10854597	12806553	21048096	20524413	61425985
Clearing Cheque	-	-	-	-	-
Total Cash in Hand	**161469654**	**184019718**	**219042572**	**536747143**	**565065889**
NRB Current Account	417867022	349295702	883495841	606049072	1324108341
Other National Bank Account	31332747	24844902	48443328	85636392	139264253
Foreign Bank Current Account	129851059	170536770	164922200	212034336	153673353
Total Cash at Bank	**740520482**	**728697092**	**1315903944**	**903719800**	**1617045947**

Source: Five year annual report of BOK

Appendix 3
Calculation of Total Investment of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
GON. Treasury Bills(T-bond)	1559514411	2072383445	1387388880	1281185367	907253830
GON.other securities (Development bond)	587105077	585985612	944652371	832037748	837722741
Investment on government security	**2146619488**	**2658369057**	**2332041251**	**2113223115**	**1744976571**
Investment on Share, Debenture and Bond	93019550	96867892	90168896	114059078	123751074
Others(Foreign Bank)	358966122	622891216	572982175	979543981	908437377
Total investment	**2598605160**	**3378128165**	**2995192322**	**1093603059**	**1032188451**

Source: Five year annual report of BOK

Appendix 4
Calculation of Loan and Advance of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Loan and Advances	6099711861	7468512890	9663050360	12692850330	14894693034
Bill Purchased	82333158	20188033	31051594	54871273	51026730
Total Risk Assets	**6182045019**	**7488700923**	**9694101954**	**12747721603**	**14945719764**
Loan Loss Provision	(269465548)	(329618344)	(294774337)	(285084062)	(298422777)
Loan & Advance(with bills) Net	**5912579471**	**7259082579**	**9399327617**	**12462637541**	**14647296987**

Source: Five year annual report of BOK

Appendix 5
Calculation of Performing Assets of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Loan & Advances	6099711861	7468512890	9663050360	12692850330	14894693034
Bill Purchased & Discount	82333158	20188033	31051594	54871273	51026730
Total Investment	2598605160	3378128165	2995192322	1093603059	1032188451
Money at call and short notice	328873857	594047379	259278628	72679836	243351500
Total Performing Assets	**9109524036**	**11460876467**	**10252979804**	**13914004498**	**16221259715**

Source: Five year annual report of BOK

Appendix 6
Calculation of Total Assets of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Cash & Bank Balance	740520482	728697092	1315903944	903719800	1617045947
Money at call and short notice	328873857	594047379	259278628	72679836	243351500
Investment	2598253410	3374711966	2992433866	3204067718	2783598566
Loan & Advances(with bills)Net	5912579472	7259082579	9399327617	12462637541	14647296987
Fixed Assets	95230942	110745198	320846395	387274153	417040587
Other Assets	181672301	203688954	278682642	154346018	222606007
Total Assets	**9857130464**	**12270973168**	**14566473089**	**17184725066**	**19930939594**

Source: Five year annual report of BOK

Appendix 7
Calculation of Current Liabilities of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Current Deposits	1302636216	1409104116	1661775129	2092338375	2294426008
Margin Deposits	123672872	98102518	169040753	152151926	173014963
Saving Deposits	3447445446	4581964433	5527292363	6596109679	7260305139
Money at call Deposits	1162126355	1618558742	1966476746	3198116163	3823395907
Total Deposits (except fixed deposit)	**6035880889**	**7707729809**	**9324584991**	**12038716143**	**13551142017**
Bills Payable	19873927	11621657	25776722	51576245	51124559
Mis. Other Liabilities	167770123	89723005	107840825	161733151	241977283
Total Current Liabilities	**6223524939**	**7809074471**	**9458202538**	**12252025539**	**13844243859**

Source: Five year annual report of BOK

Appendix 8
Calculation of Total Deposit of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Current Deposits	1302636216	1409104116	1661775129	2092338375	2294426008
Margin Deposits	123672872	98102518	169040753	152151926	173014963
Non-Interest Bearing Deposits	**1426309088**	**1507206634**	**1830815882**	**2244490301**	**2467440971**
Saving Deposits	3447445446	4581964433	5527292363	6596109679	7260305139
Money at call Deposits	1162126355	1618558742	1966476746	3198116163	3823395907
Fixed Deposits	2878867709	2709753765	3037170561	3703175532	4474617501
Interest Bearing Deposits	**7488439510**	**8910276940**	**10530939670**	**13497401374**	**15558318547**
Total Deposits	**8914748598**	**10417483574**	**12361755552**	**15741891675**	**18025759518**

Source: Five year annual report of BOK

Appendix 9
Calculation of Net Worth of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Total Assets	**9857130464**	**12270973168**	**14566473089**	**17184725066**	**19930939594**
Total Current Liabilities	6223524939	7809074471	9458202538	12252025539	13844243859
Fixed Deposits	2878867709	2709753765	3037170561	3703175532	4474617501
Loan & Advances	6000000	553180000	730000000	100000000	100000000
Total Long Term Debt	**2884867709**	**3262933765**	**3767170561**	**3803175532**	**4574617501**
Total Liabilities	**9108392648**	**11072008236**	**13225373099**	**16055201071**	**18418861360**
Net Worth (Total Assets – Total Liabilities)	**748737816**	**1198964932**	**1341099990**	**1129523995**	**1512078234**
Paid up Capital	463580900	463580900	603141300	603141300	844397900
Profit Capitalization	-	-	-	-	-
Retained Earning	257156916	376152981	378837432	738932488	897192263
Shareholder's Equity	720737816	839733881	981978731	1342073787	1741590163
No. of Common Share	4635809	4635809	6031413	6031413	8443979
Net Worth Per Share	**155.47**	**181.14**	**162.81**	**222.51**	**206.25**

Source: Five year annual report of BOK

Appendix 10
Calculation of Interest Paid by BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Interest on Fixed Deposit	95662584	133974509	129167788	147172636	233725444
Interest on money at call deposits	63348389	68316458	69771746	91811794	135514377
Interest on saving deposits	73646003	92222809	121063171	149010516	158837111
Total Interest on Deposits	**232656976**	**294513776**	**320002705**	**387994946**	**528076932**
Interest on Loan Deposit	8982189	13641872	19178306	29548486	35036075
Others	-	-	-	-	-
Total Interest Expenses (paid)	**241639165**	**308155648**	**339181011**	**417543432**	**563113007**

Source: Five year annual report of BOK

Appendix 11
Calculation of Interest Receive of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Interest on Loan, Advances, & Overdraft	502945058	550144112	645651315	887298870	1199081343
Interest on Investment	88250885	118580128	112363921	90603868	129277795
Other	15899719	49397138	29160770	35319655	14116599
Total Interest Income(Received)	**607095662**	**718121378**	**787176006**	**1013222393**	**1342475737**

Source: Five year annual report of BOK

Appendix 12
Calculation of Net Profit of BOK

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Interest Income	607095662	718121378	819003947	1034157874	1347755382
Commission & Discount	72351675	70776158	97431129	129415528	150919291
Foreign Exchange Fluctuating Income	72114868	78955495	80826013	93765039	136036316
Other Operating Income	4467286	16967545	19002897	23167724	43222093
Non-Operating Income	(468771)	1080139	(2779849)	810748	(2027469)
Total Income	**755560720**	**885900715**	**1013484137**	**1281316913**	**1675905613**
Interest Expenses (P/L A/c)	241639164	308155647	339181011	417543432	563113007
Staff Expenses	53822309	59119564	69740384	90601920	146494578
Office Operating Expenses	99190178	117591235	138429941	170480908	233667863
Staff Bonus Provision	22699217	30120837	38341169	52789898	66126948
Non-Operating Expenses	518267	-	-	-	-
Total Expenses	**417869135**	**514987283**	**585692505**	**731416158**	**1009402396**
Net Profit Before Tax & Provision	**337691585**	**370913432**	**427791632**	**549900755**	**666503217**
Loan Loss Provision	(133916898)	(78381056)	(81894981)	(38438498)	(33745192)
Income Tax	(64763233)	(98767743)	(121024706)	(162535369)	(200304605)
Net Profit After Tax	**139011454**	**193764633**	**224871945**	**348926888**	**432453420**
Income Tax	64763233	98767763	121024706	162535369	200304605
Profit Before Tax	**203774687**	**292532376**	**345896651**	**511462257**	**632758025**
Interest Paid (Calculated)	241639165	308155648	339181011	417543432	563113007
Earning Before Interest and Tax	**445413852**	**600688024**	**685077662**	**929005689**	**1195871032**

Source: Five year annual report of BOK

Appendix B
Calculation of Ratios

4.1 Liquidity Ratios

4.1.1 Current Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Current Assets	10257243209	11412786054	13463607773	15706624310	18475277012
Current Liabilities	6223524939	7809074471	9458202538	12252025539	13844243859
Ratio	**1.65**	**1.46**	**1.42**	**1.28**	**1.33**

(See: Appendix 1 for current Assets and 7 for current Liabilities)

4.1.2 Quick Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Quick Assets	3216013827	3988883528	3907223820	3089622751	3605374018
Current Liabilities	6223524939	7809074471	9458202538	12252025539	13844243859
Ratio	**0.52**	**0.51**	**0.41**	**0.25**	**0.26**

(See: Appendix 1 for Quick Assets & & for Current Liabilities)

4.1.3 Cash and Bank Balance to Current Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Cash & Bank Balance	740520482	728697092	1315903944	903719800	1617045947
Current Assets	10257243209	11412786054	13463607773	15706624310	18475277012
Ratio	**7.22%**	**6.38%**	**9.77%**	**5.75%**	**8.75%**

(See: Appendix 1 for current Assets and 2 for Cash & Bank Balance)

4.1.4 Cash and Bank Balance to Short-term Deposits Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Cash & Bank Balance	740520482	728697092	1315903944	903719800	1617045947
Total Deposits (Except FD)	6035880889	7707729809	9324584991	12038716143	13551142017
Ratio	**12.27%**	**9.45%**	**14.11%**	**7.51%**	**11.93%**

(See: Appendix 2 for Cash & Bank Balance & 7 for Deposits except FD)

4.1.5 Cash and Bank Balance to Total Deposits Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Cash & Bank Balance	740520482	728697092	1315903944	903719800	1617045947
Total Deposits	8914748598	10687483574	12361755552	15741891675	18025759518
Ratio	**8.31%**	**6.82%**	**10.64%**	**5.74%**	**8.97%**

(See: Appendix 2 for Cash & Bank Balance & 8 for Total Deposits)

4.1.6 NRB Balance to Current and Saving deposits Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
NRB Balance	417867022	349295702	883495841	606049072	1324108341
Current & Saving Deposit	4750081662	6261068549	7189067492	8688448054	9554731147
Ratio	**8.80%**	**5.58%**	**12.29%**	**6.98%**	**13.86%**

(See: Appendix 2 for NRB Balance and 8 for Current and Saving Deposit)

4.1.7 NRB Balance to Fixed Deposit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
NRB Balance	417867022	349295702	883495841	606049072	1324108341
Fixed Deposits	2878867709	2709753765	3037170561	3703175532	4474617501

Ratio	**14.51%**	**12.89%**	**29.09%**	**16.37%**	**29.59%**

(See: Appendix 2 for NRB Balance and 8 Fixed Deposits)

4.2 Turnover Ratios
4.2.1 Loans and Advances to Total Deposits Ratio

FY	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Loans and Advances	5912579471	7259082579	9399327617	12462637541	14647296987
Total Deposits	8914748598	10687483574	12361755552	15741891675	18025759518
Ratio	**66.32%**	**67.92%**	**76.04%**	**79.12%**	**81.26%**

(See: Appendix 4 for Loans and Advances and 8 for Total Deposits)

4.2.2 Loans and Advances to Saving Deposits Ratio

FY	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Loans and Advances	5912579471	7259082579	9399327617	12462637541	14647296987
Saving deposits	3447445446	4581964433	5527292363	6596109679	7260305139
Ratio	**1.72**	**1.50**	**1.70**	**1.89**	**2.02**

(See: Appendix 4 for Loans and Advances and 8 for Saving Deposits)

4.2.3 Loan and Advances to Fixed Deposits Ratio

FY	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Loans and Advances	5912579471	7259082579	9399327617	12462637541	14647296987
Fixed deposits	2878867709	2709753765	3037170561	3703175532	4474617501
Ratio	**2.05**	**2.68**	**3.09**	**3.37**	**3.27**

(See: Appendix 4 for Loans and Advances and 8 Fixed Deposits)

4.2.4 Investment to Total Deposit Ratio

FY	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Investment	2598605160	3378128165	2995192322	1093603059	1032188451
Total Deposits	8914748598	10687483574	12361755552	15741891675	18025759518
Ratio	**29.15%**	**31.61%**	**24.23%**	**6.95%**	**5.73%**

(See: Appendix 3 for Investment and 8 for Total Deposits)

4.2.5 Performing Assets to Total Assets Ratio

FY	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**
Total performing assets	9109524036	11460876467	10252979804	13914004498	16221259715
Total Assets	9857130464	12270973168	14566473089	17184725066	19930939594
Ratio	**92.42%**	**93.40%**	**70.39%**	**80.97%**	**81.39%**

(See: Appendix 5 for Performing Assets and 6 for Total Assets)

4.3 Profitability Ratios
4.3.1 Return on Total Assets

FY	**2061/62**	**2062/63**	**2063/64**	**2064/65**	**2065/66**

Net Profit After Tax	139011454	193764633	224871945	348926888	432453420
Total Assets	9857130464	12270973168	14566473089	17184725066	19930939594
Ratio	**18.57%**	**16.06%**	**16.72%**	**20.30%**	**21.69%**

(See: Appendix 12 for Net Profit after Tax and 6 for Total Assets)

4.3.2 Return on Net Worth/Shareholder's Equity or ROSE

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Net Profit After Tax	139011454	193764633	224871945	348926888	432453420
Net Worth	748737816	1198964932	1341099990	1129523995	1512078234
Ratio	**18.57%**	**16.16%**	**16.76%**	**30.89%**	**28.59%**

(See: Appendix 12 for Net Profit after Tax and 9 for Net Worth)

4.3.3 Return on Total Deposits

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Net Profit After Tax	139011454	193764633	224871945	348926888	432453420
Total Deposits	8914748598	10687483574	12361755552	15741891675	18025759518
Ratio	**1.56%**	**1.81%**	**1.82%**	**2.22%**	**2.39%**

(See: Appendix 12 for Net Profit after Tax and 8 for Total Deposits)

4.3.4 Interest Expenses to Interest Incomes Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Total Interest Expenses	241639165	308155648	339181011	417543432	563113007
Total Interest Income	607095662	718121378	787176006	1013222393	1342475737
Ratio	**39.80%**	**42.91%**	**43.08%**	**41.21%**	**41.95%**

(See: Appendix 10 for Total Interest Expenses and 11 for Interest Income)

4.3.5 Interest on Earned to Total Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Total Interest Earned	607095662	718121378	787176006	1013222393	1342475737
Total Assets	9857130464	12270973168	14566473089	17184725066	19930939594
Ratio	**6.16%**	**5.85%**	**5.40%**	**5.89%**	**6.74%**

(See: Appendix 11 for Interest Income and 6 for Total Assets)

4.4 Leverage Ratios
4.4.1 Debt-Equity Ratios (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Total Debts	9108392648	11072008236	13225373099	16055201071	18418861360
Shareholder's Equity	720737816	839733881	981978731	1342073787	1741590163
Ratio	**12.63**	**13.18**	**13.46**	**11.96**	**10.58**

(See: Appendix 9 for Total Debts and Shareholder's Equity)

4.4.2 Debt-Assets Ratios

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Total Debts	9108392648	11072008236	13225373099	16055201071	18418861360
Total Assets	9857130464	12270973168	14566473089	17184725066	19930939594

| Ratio | 92.40% | 90.22% | 90.79% | 93.43% | 92.41% |

(See: Appendix 9 for Total Debts and 6 for Total Assets)

4.4.3 Interest-Coverage Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Earning Before Interest and Tax	445413852	600688024	685077662	929005689	1195871032
Interest Paid	241639165	308155648	339181011	417543432	563113007
Ratio	**1.84**	**1.95**	**2.02**	**2.22**	**2.12**

(See: Appendix 12 for EBIT and Interest Charge)

4.4.4 Long Term Debt to Net Worth Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Long Term Debt	2884867709	3262933765	3767170561	3803175532	4574617501
Net Worth	748737816	1198964932	1341099990	1129523995	1512078234
Ratio	**3.85**	**2.72**	**2.81**	**3.37**	**3.02**

(See: Appendix 9 for Long Term Debt and Net Worth)

4.5 Capital Adequacy Ratios
4.5.1 Net Worth to Total Deposits Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Net Worth	748737816	1198964932	1341099990	1129523995	1512078234
Total Deposits	8914748598	10687483574	12361755552	15741891675	18025759518
Ratio	**8.40%**	**11.29%**	**10.88%**	**7.17%**	**8.39%**

(See: Appendix 9 for Net Worth & 8 for Total Deposits)

4.5.2 Net Worth to Total Assets Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Net Worth	748737816	1198964932	1341099990	1129523995	1512078234
Total Assets	9857130464	12270973168	14566473089	17184725066	19930939594
Ratio	**7.60%**	**9.83%**	**9.23%**	**6.57%**	**7.59%**

(See: Appendix 9 for Net Worth & 6 for Total Assets)

4.5.3 Net Worth to Total Credit Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Net Worth	748737816	1198964932	1341099990	1129523995	1512078234
Total Credit	6182045019	7488700923	9694101954	12747721603	14945719764
Ratio	**12.11%**	**16.11%**	**13.87%**	**8.86%**	**10.12%**

(See: Appendix 9 for Net Worth & 4 for Total Credit)

4.6 Assets Quality Ratios
4.6.1 Loan Loss Coverage Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Loan Loss Provision	269465548	329618344	294774337	285084062	298422777

Total Risk Assets	6182045019	7488700923	9694101954	12747721603	14945719764
Ratio	**4.36%**	**3.07%**	**3.04%**	**2.24%**	**2.00%**

(See: Appendix 4 for Loan Loss Provision & Total Risk Assets)

4.6.2 Loan Loss Provision to Total Income Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Loan Loss Provision	269465548	329618344	294774337	285084062	298422777
Total Income	755560720	885900715	1013484137	1281316913	1675905613
Ratio	**35.66%**	**25.92%**	**29.09%**	**22.24%**	**17.81%**

(See: Appendix 4 for Loan Loss Provision & Total Income)

4.6.3 Loan Loss Provision to Total Deposits Ratio

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Loan Loss Provision	269465548	329618344	294774337	285084062	298422777
Total Deposits	8914748598	10687483574	12361755552	15741891675	18025759518
Ratio	**3.02%**	**2.15%**	**2.38%**	**1.81%**	**1.66%**

(See: Appendix 4 for Loan Loss Provision & Total Deposits)

4.7 Other Indicators
4.7.1 Earning Per Share (EPS) in Rs.

FY	2061/62	2062/63	2063/64	2064/65	2065/66
Net Profit After Tax	139011454	193764633	224871945	348926888	432453420
Equity Shares	4635809	4635809	6031413	6031413	8443979
EPS	**29.99**	**41.80**	**37.28**	**57.85**	**51.24**

Source: Five years annual report of BOK

4.7.2 Price-Earning Ratio (P/E Ratio) (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
MVPS	430.00	850.00	1375.00	2350.00	1825.00
EPS	30.10	43.67	43.50	59.94	54.68
Ratio	**14.29**	**19.46**	**31.61**	**39.21**	**32.78**

Source: Five year annual report (Principal Indicators) of BOK

4.7.3 Market Value Per Share to Book Value Per Share Ratio (Times)

FY	2061/62	2062/63	2063/64	2064/65	2065/66
MVPS	430.00	850.00	1375.00	2350.00	1825.00
BVPS	213.60	230.67	164.68	222.51	206.25
Ratio	**2.01**	**3.68**	**8.35**	**10.56**	**8.85**

Source: Five year annual report (Principal Indicators) of BOK

Appendix C
4.8 Correlation analysis

4.8.1 Calculation of correlation coefficient between total deposit and loan and advances of BOK

<div align="right">(Rs. In Million)</div>

FY	TD(X)	X^2	LA (Y)	Y^2	XY
2061/62	8914.75	79472767.56	5912.58	34958602.26	52709172.56
2062/63	10687.48	114222228.80	7259.08	52694242.45	77581272.32
2063/64	12361.76	152813110.30	9399.32	88347216.46	116192138.00
2064/65	15741.89	247807100.80	12462.63	155317146.50	196185350.60
2065/66	18025.76	324928023.60	14647.29	214543104.30	264028534.20
	$\Sigma X = 65731.64$	$\Sigma X^2 = 919243231.06$	$\Sigma Y = 49680.90$	$\Sigma Y^2 = 545860311.97$	$\Sigma XY = 706696467.68$

$$r_{xy} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 706696467.68 - 65731.64 \times 49680.90}{\sqrt{5 \times 919243231.06 - (65731.64)^2}\sqrt{5 \times 545860311.97 - (49680.90)^2}}$$

$$= \frac{3533482338 - 3265607034}{\sqrt{4596216155 - 4320648497}\sqrt{2729301560 - 2468191825}}$$

$$= \frac{267875304}{\sqrt{275567658}\sqrt{261109735}}$$

$$= \frac{267875304}{268241305.8}$$

$$= 0.9986$$

Probable Error of Correlation Coefficient PE(r)

$$PE(r) = 0.6745\frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745\frac{1 - (0.9986)^2}{\sqrt{5}}$$

$$= 0.6745\frac{0.0028}{2.24}$$

$$= 0.0008$$

And, 6PE(r) $= 6 \times 0.0008$
$= 0.0048$

4.8.2 Calculation of Correlation Coefficient between Net Profit and Loan and Advances of BOK

FY	NP(X)	X^2	LA(Y)	Y^2	XY
2061/62	139.01	19323.78	5912.58	34958596.00	821907.75
2062/63	193.76	37542.93	7259.08	52694242.44	1406519.34
2063/64	224.87	50566.52	9399.33	88347359.65	2113627.34
2064/65	348.92	121745.17	12462.63	155317146.50	4348460.86
2065/66	432.45	187013.00	14647.29	214543104.30	6334220.56
	$\Sigma X = 1339.01$	$\Sigma X^2 = 416191.40$	$\Sigma Y = 49685.89$	$\Sigma Y^2 = 545860448.89$	$\Sigma XY = 15024735.85$

$$r_{xy} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 15024735.85 - 1339.01 \times 49685.89}{\sqrt{5 \times 416191.40 - (1339.01)^2}\sqrt{5 \times 545860448.89 - (49685.89)^2}}$$

$$= \frac{75123679.25 - 66529903.56}{\sqrt{2080957 - 1792947.78}\sqrt{2729302244 - 2468687665}}$$

$$= \frac{8593775.69}{\sqrt{288009.22}\sqrt{260614579}}$$

$$= 0.9919$$

Probable Error of Correlation Coefficient PE(r)

$$PE(r) = 0.6745\frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745\frac{1 - (0.9919)^2}{\sqrt{5}}$$

$$= 0.6745 \times \frac{0.0161}{2.24}$$

$$= 0.0048$$

And, 6PE(r) $= 6 \times (0.0048)$

$$= 0.0288$$

4.8.3 Calculation of Correlation Coefficient between Performing Assets and Net Profit of BOK

FY	PA(X)	X^2	NP(Y)	Y^2	XY
2061/62	9109.52	82983354.63	139.01	19323.78	1266314.38
2062/63	11460.87	131351999.50	193.76	37542.93	2220662.05
2063/64	10252.98	105123598.80	224.87	50566.52	2305587.61
2064/65	13914.00	193599396.00	348.92	121745.17	4854872.88
2065/66	16221.26	263129275.90	432.45	187013.00	7014883.88
	$\Sigma X = 60958.63$	$\Sigma X^2 = 776187624.90$	$\Sigma Y = 1339.01$	$\Sigma Y^2 =$ 416191.40	$\Sigma XY =$ 17662320.80

$$r_{xy} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 17662320.80 - 60958.63 \times 1339.01}{\sqrt{5 \times 776187624.90 - (60958.63)^2} \sqrt{5 \times 416191.40 - (1339.01)^2}}$$

$$= \frac{88311604 - 81624215.15}{\sqrt{3880938124 - 3715954571} \sqrt{2080957 - 1792947.78}}$$

$$= \frac{6687388.85}{\sqrt{164983553} \sqrt{288009.22}}$$

$$= 0.9701$$

Probable Error of Correlation Coefficient PE(r)

$$\text{PE(r)} \qquad = 0.6745 \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.9701)^2}{\sqrt{5}}$$

$$= 0.6745 \times \frac{0.0589}{2.24}$$

$$= 0.0177$$

$$\text{And, 6PE(r)} \quad = 6 \times (0.0177)$$

$$= 0.1062$$

4.8.4 Calculation of Correlation Coefficient between Total Deposits and Performing Assets of BOK

(Rs. In Million)

FY	TD(X)	X^2	PA(Y)	Y^2	XY
2061/62	8914.75	79472767.56	9109.52	82983354.63	81209093.42
2062/63	10687.48	114222228.80	11460.87	131351999.50	122487818.90
2063/64	12361.76	152813110.30	10252.98	105123598.80	126744878.00
2064/65	15741.89	247807100.80	13914.00	193599396.00	219032657.40
2065/66	18025.76	324928023.60	16221.26	263129275.90	292400539.60
	$\Sigma X = 65731.64$	$\Sigma X^2 = 919243231.06$	$\Sigma Y = 60958.63$	$\Sigma Y^2 = 776187624.90$	$\Sigma XY = 841874987.32$

$$r_{xy} \qquad = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2} \sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 841874987.32 - 60958.63 \times 65731.64}{\sqrt{5 \times 919243231.06 - (65731.64)^2} \sqrt{5 \times 776187624.90 - (60958.63)^2}}$$

$$= \frac{4209374936 - 4006910722}{\sqrt{4596216155 - 4320648497} \sqrt{3880938124 - 3715954571}}$$

$$= \frac{202464214}{\sqrt{275567658} \sqrt{164983553}}$$

$$= 0.9495$$

Probable Error of Correlation Coefficient PE(r)

$$\text{PE(r)} \qquad = 0.6745 \frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1-(0.9495)^2}{\sqrt{5}}$$

$$= 0.6745 \times \frac{0.0984}{2.24}$$

$$= 0.0296$$

And, $6PE(r) = 6 \times (0.0296)$

$$= 0.1779$$

4.8.5 Calculation of Correlation Coefficient between MPS and EPS of BOK

FY	MPS(X)	X^2	EPS(Y)	Y^2	XY
2061/62	430.00	184900	29.99	899.40	12895.70
2062/63	850.00	722500	41.80	1747.24	35530.00
2063/64	1375.00	2805625	37.28	1389.80	51260.00
2064/65	2350.00	5522500	57.85	3346.62	135947.50
2065/66	1825.00	3330625	51.24	2625.54	93513.00
	$\Sigma X = 6830$	$\Sigma X^2 = 12566150$	$\Sigma Y = 218.16$	$\Sigma Y^2 = 10008.60$	$\Sigma XY = 329146.20$

$$r_{xy} = \frac{n\Sigma XY - \Sigma X \Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 329146.20 - 6830 \times 218.16}{\sqrt{5 \times 12566150 - (6830)^2}\sqrt{5 \times 10008.60 - (218.16)^2}}$$

$$= \frac{1645731 - 1490032.80}{\sqrt{62830750 - 46648900}\sqrt{50043 - 47785.96}}$$

$$= \frac{155698.20}{\sqrt{16181850}\sqrt{2257.04}}$$

$$= 0.8147$$

Probable Error of Correlation Coefficient PE(r)

$$PE(r) = 0.6745\frac{1-r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1-(0.8147)^2}{\sqrt{5}}$$

$$= 0.6745 \times \frac{0.3363}{2.24}$$

$$= 0.1013$$

And, $6PE(r) = 6 \times (0.1013)$

$$= 0.6078$$

4.8.6 Calculation of Correlation Coefficient between MPS and NWPS of BOK

FY	MPS(X)	X^2	NWPS(Y)	Y^2	XY
2061/62	430.00	184900	155.47	24170.92	66852.10
2062/63	850.00	722500	181.14	32811.69	153969.00
2063/64	1375.00	2805625	162.81	26507.09	223863.75
2064/65	2350.00	5522500	222.51	49510.70	522898.50
2065/66	1825.00	3330625	206.25	42539.06	376406.25
	$\Sigma X = 6830$	$\Sigma X^2 = 12566150$	$\Sigma Y = 928.18$	$\Sigma Y^2 = 175539.46$	$\Sigma XY = 1343989.60$

$$r_{xy} = \frac{n\Sigma XY - \Sigma X\Sigma Y}{\sqrt{n\Sigma X^2 - (\Sigma X)^2}\sqrt{n\Sigma Y^2 - (\Sigma Y)^2}}$$

$$= \frac{5 \times 1343989.60 - 6830 \times 928.18}{\sqrt{5 \times 12566150 - (6830)^2}\sqrt{5 \times 175539.46 - (928.18)^2}}$$

$$= \frac{6719948 - 6339469.40}{\sqrt{62830750 - 46648900}\sqrt{877697 - 861518.11}}$$

$$= \frac{380478.60}{\sqrt{16181850}\sqrt{16178.89}}$$

$$= 0.7436$$

Probable Error of Correlation Coefficient PE(r)

$$PE(r) = 0.6745\frac{1 - r^2}{\sqrt{n}}$$

$$= 0.6745 \times \frac{1 - (0.7436)^2}{\sqrt{5}}$$

$$= 0.6745 \times \frac{0.4471}{2.24}$$

$$= 0.1346$$

$$\text{And, } 6PE(r) = 6 \times (0.1346)$$

$$= 0.8076$$

4.9 Trend Analysis
4.9.1 Calculation of Least Square Trend Value of Total Deposits of BOK

FY	X (Year- 63/64)	X^2	Y	XY
2061/62	-2	4	8914748598	-17829497196
2062/63	-1	1	10687483574	-10687483574
2063/64	0	0	12361755552	0
2064/65	1	1	15741891675	15741891675
2065/66	2	4	18025759518	36051519036
Σ	0	10	65731639917	23276429941

$$a = \frac{\Sigma Y}{N} = \frac{65731639917}{5} = 13146327983.4 = 13146.32 \text{ M,}$$

$$b = \frac{\Sigma XY}{\Sigma X^2} = \frac{23276429941}{10} = 2327642994.1 = 2327.64 \text{ M}$$

Now, straight line method of total deposits of BOK = Y_c =a+bX
$$= 13146.32+2327.64X$$

Year (t)	X=(t-2063/64)	Y_c =a+bX
2061/62	-2	8491.04
2062/63	-1	10818.68
2063/64	0	13146.32
2064/65	1	15473.96
2065/66	2	17801.60
2066/67	3	20129.24
2067/68	4	22456.88
2068/69	5	24784.52
2069/70	6	27112.16
2070/71	7	29439.80

4.9.2 Calculation of Least Square Trend Value of Net Profit of BOK

FY	X (Year- 63/64)	X^2	Y	XY
2061/62	-2	4	139011454	-278022908
2062/63	-1	1	193764633	-193764633
2063/64	0	0	224871945	0
2064/65	1	1	348926888	348926888
2065/66	2	4	432453420	864906840
Σ	0	10	1339028340	742046187

a= $\dfrac{\sum Y}{N} = \dfrac{1339028340}{5}$ =267805668 = 267.81 M,

b= $\dfrac{\sum XY}{\sum X^2} = \dfrac{742046187}{10}$ =74204618.7 = 74.20 M

Now, straight line method of net profit of BOK = Y_c =a+bX

=267.81+74.20 X

Year (t)	X=(t-2063/64)	Y_c =a+bX
2061/62	-2	119.41
2062/63	-1	193.61
2063/64	0	267.81
2064/65	1	342.01
2065/66	2	416.21
2066/67	3	490.41
2067/68	4	564.61
2068/69	5	638.81
2069/70	6	713.01
2070/71	7	787.21

4.9.3 Calculation of Least Square Trend Value of Net Worth of BOK

FY	X (Year- 63/64)	X^2	Y	XY
2061/62	-2	4	748737816	-1497475632
2062/63	-1	1	1198964932	-1198964932

2063/64	0	0	1341099990	0
2064/65	1	1	1129523995	1129523995
2065/66	2	4	1512078234	3024156468
Σ	0	10	5930404967	1457239899

a= $\dfrac{\sum Y}{N} = \dfrac{5930404967}{5}$ =1186080993 = 1186.10 M,

b= $\dfrac{\sum XY}{\sum X^2} = \dfrac{1457239899}{10}$ =145723989.9 = 145.72 M

Now, straight line method of net worth of BOK = Y_c =a+bX

=1186.10+145.72 X

Year (t)	X=(t-2063/64)	Y_c =a+bX
2061/62	-2	894.66
2062/63	-1	1040.38
2063/64	0	1186.10
2064/65	1	1331.82
2065/66	2	1477.54
2066/67	3	1623.26
2067/68	4	1768.98
2068/69	5	1914.70
2069/70	6	2060.42
2070/71	7	2206.14

4.9.4 Calculation of Least Square Trend Value of Loan and Advances

FY	X (Year- 63/64)	X^2	Y	XY
2061/62	-2	4	5912579471	-11825158942
2062/63	-1	1	7259082579	-7259082579
2063/64	0	0	9399327617	0
2064/65	1	1	12462637541	12462637541
2065/66	2	4	14647296987	29294593974
Σ	0	10	49680924194	22672989994

a= $\dfrac{\sum Y}{N} = \dfrac{49680924194}{5}$ =9936184838.8 = 9936.18 M,

b= $\dfrac{\sum XY}{\sum X^2} = \dfrac{22672989994}{10}$ =2267298999.4 = 2267.29 M

Now, straight line method of loan and advances of BOK = Y_c =a+bX

=9936.18+2267.29 X

Year (t)	X=(t-2063/64)	Y_c =a+bX

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2061/62	-2	5401.60
2062/63	-1	7668.89
2063/64	0	9936.18
2064/65	1	12203.47
2065/66	2	14470.76
2066/67	3	16738.05
2067/68	4	19005.34
2068/69	5	21272.63
2069/70	6	23539.92
2070/71	7	25807.21

4.9.5 Calculation of Least Square Trend Value of Performing Assets

FY	X (Year- 63/64)	X^2	Y	XY
2061/62	-2	4	9109524036	-18219048072
2062/63	-1	1	11460876467	-11460876467
2063/64	0	0	10252979804	0
2064/65	1	1	13914004498	13914004498
2065/66	2	4	16221259715	32442519430
Σ	0	10	59058644520	16676699489

$$a= \frac{\sum Y}{N} = \frac{59058644520}{5} = 11811728904 = 11811.73 \text{ M},$$

$$b= \frac{\sum XY}{\sum X^2} = \frac{16676699489}{10} = 1667669948.9 = 1667.67 \text{ M}$$

Now, straight line method of loan and advances of BOK = Y_c =a+bX

=11811.73+1667.67X

Year (t)	X=(t-2063/64)	Y_c =a+bX
2061/62	-2	8476.39
2062/63	-1	10144.06
2063/64	0	11811.73
2064/65	1	13479.40
2065/66	2	15147.07
2066/67	3	16814.74
2067/68	4	18482.41
2068/69	5	20150.08
2069/70	6	21817.75
2070/71	7	23485.42