CHAPTER - I

INTRODUCTION

1.1 Background of the Study

In general terms, "Bank" is a financial institution that performs various monitory transactions. In other words, the bank purchases and sells the money. It collects deposit and pays certain percentage of interest for them. The collected deposit is then transferred to the other people in the form if credits, where the bank charges interest. The interest for the credit will be higher than the interest for the deposit. The difference between these interests is called the spread rate, which is the profit of the bank. "Banking system is volatile and sensitive sector of national economy, which requires effective monitoring and effective supervision. Smooth and effective regulation of banking activities is a must for sustainable economic growth of a country. The regulatory agency should always be watchful of banking activities carried out by governmental and non-governmental and financial institution".

National development of any country depends upon the economic development of that country and economic development is supported by financial infrastructure of that country. Bank constitutes an important segment of financial infrastructure of any country. Bank came into existence mainly with the objective of collecting the idle funds and mobilizing them to productive sectors causing overall economic development, which finally leads to national development of country.

1.2 Introduction of ADBNL

With the main objective of providing institutional credit for enhancing the production and productivity of the agricultural sector in the country, the Agriculture Development Bank, Nepal was established in 1968 under the ADBN Act 1967, as successor to the co-operative Bank. The Land Reform Savings Corporation was merged with ADBN in 1973, Subsequent amendments to the Act empowered the bank to extend credit to small farmers under group liability and expand the scope of financing to promote cottage industries.

The amendments also permitted the bank to engage in commercial banking activities for the mobilization of domestic resources.

Agriculture Development Bank Limited (ADBL) is an autonomous organization largely owned by Government of Nepal. The bank has been working as a premier rural credit institution since the last three decades, contributing more than 67 percent of institutional credit supply in the country. Hence, rural finance is the principal operational area of ADBL. Besides, it has also been executing Small Farmer Development Program (SFDP), the major poverty alleviation program launched in the country. Furthermore, the bank has also been involved in commercial banking operation since1984. The enactment of Bank and Financial Institution Ordinance (BAFIO) in February 2004 abolished all Acts related to financial institutions including the ADBN Act, 1967. In line with the BAFIO, ADBL has been incorporated as a public limited company on July 14, 2005. Thus, ADBL operates as an "A" category financial Institution under the legal framework of BAFIO and the company Act, 2053.

The bank provides credit services broadly on short, medium and long-term basis to individuals, co-operatives and corporate bodies. Short-term loans are provided for the period of maximum 2 years for the activities such as production, working capital, marketing and non-farm activities. Medium-term loans are extended for the period of 2 to 7 years for irrigation, farm mechanization, agro/cottage industries (fixed investment) and agri-business including livestock. Long-term loans are provided for period of more than 7 years for the purposes like warehouse, cold storage, tea/coffee and horticultural crops having long gestation period.

In addition to providing rural and agricultural credit, the bank accepts saving from borrowers in the form of Client Security Fund. Moreover, the bank is also involved in technology promotion particularly in the field of surface and ground water irrigation, micro-hydro and alternative energy including biogas as well as solar power. With the primary objective of mobilizing urban resources to the rural sector the bank is undertaking commercial banking operations since 1985. The activities of commercial banking operation broadly include deposit collection and landing operation. Besides, services related to guarantee and fund transfers through draft, fax, inward bill collection, outward bill collection etc. are also provided to clients. Deposit (current account), saving and term deposits. In lending operation, the bank has concentrated on commerce, industry overdraft (general and industrial), contract, hire purchase (construction and transportation), service loan (tourism, health, secretarial services etc), demand loan, education loan, house loan, project loan and agriculture loan.

Corporate Vision, Mission and Objective of ADBNL

Vision

To be the pre-eminent bank, providing services throughout Nepal.

Mission

To deliver comprehensive banking and financial service, capitalizing its extensive network in rural areas.

Objectives

To provide quality banking and financial services to clients adopting market driven strategy delivering sustained and competitive return on investment.

1.3 Focus of the Study

The focus of this study is "The Financial Performance of Agriculture Development Bank Limited". Financial performance covers the financial analysis and other portfolios of the ADBL. Financial analysis is the process of determining the significant operating and financial characteristics of a firm from accounting data and financial statements. The goal of financial analysis is to determine the efficiency and the performance of the firms' management as reflected in the financial records and reports (Hampton, 1983: 121).

Besides the financial analysis, the study is also focused on Income and expenditure analysis and statistical analysis. Financial ratio has helped the researcher to make a qualitative analysis about the financial performance of the bank. The income and expenditure analysis is the percentage in relation to total assets or total sales, which has helped the researcher to study trends in financial statements over time. The statistical analysis refers either to quantitative information or to a method of dealing with quantitative information.

1.4 Statement of the Problem

Financial management aspect is considered to be the vital and integral part of overall management of any enterprise, ensuring financial strength through adequate cash flow, liquidity and better utilization of assets. Commercial banks set up in Nepal seem to need greater funds in terms of financing to the expansion of their assets because of growing number of new establishment of banks in the country. These banks deal with other people's deposits, most of which are payable on demand. There is no doubt that the survival of the existing commercial banks and other financial institutions depend upon how they manage their assets and liabilities to maximize their profits with the minimum exposure of assets to risk, and are guided by three important conflicting criteria of solvency, liquidity and profitability. Therefore, the financial management is the main indicator of the success or failure of any business firm. Financial condition of the business firm should be sound from the point of view of shareholders, debenture holders, financial institutions and nation as a whole.

The tendency to concentration of banks only in urban areas like Kathmandu, Biratnagar etc. has raised certain questions. This state of affairs cannot contribute much to the socio – economic development of the country where 90% of the population lives in the rural area and 79 % of population depends upon agriculture. The Agriculture Development Bank especially oriented to extend their operation in rural areas. Despite the circular of NRB, the central Bank of the country, regarding compulsory investment of 10 % of their total investment in their rural areas, these banks all inclined to pay fines rather than complying with the rule. This problem remains to be solved so that even the small investors in the rural areas are deprived of benefits from the services of such banks. Moreover, even the existing branches of the commercial bank in the rural areas are not able to mobilize the local resources effectively.

Agriculture Development Bank Limited (ADBL) has achieved a remarkable success in banking sector in terms of market share. In the context of open market economy, the Bank is prone to both external and internal threats. The economy of the country cannot be termed as bright in recent past years. Financial sector has really suffered because of the continuous decline owing to the poor performance of industrial, trading, tourism and other fronts of the economy. The vicious circle of low income, low savings and low investment, which is the key factor responsible for low growth rate of the country, enhances the need for vigorous efforts to increase the level of saving. Saving mobilization and effective credit management system is must for economic development especially for a country like Nepal where the economic growth rate is very low. In this regard, the good banking system can play a vital role in accelerating the pace of economic development through the mobilization of scattered savings and channeling it in the productive sector of the economy. The adaptation of open and free market economic and financial policies is believed to generate more savings as well as improve investment opportunities. Adequate infrastructure development in saving mobilization and investment is therefore the demand of the day. Therefore, the Bank can contribute a lot by serving in the path of economic development through proper mobilization of savings and investing it in the productive and development sector of the economy as well as ensuring qualitative banking services for the development of the economy of Nepal through banking in appropriate and new innovative banking technologies.

This study attempts to evaluate the financial performance of the bank with the help of various financial and statistical tools. This study also attempts to recommend some suggestions for improvement in financial performance aspect. This study was focused on the financial performances of ADBL. Therefore, this study has aimed in answering the following research question:

1. Has the bank been using its capital efficiently?
2. What is the liquidity position of the bank?
3. What are the financial performance trends of the bank during the study period?
4. What is the level of profitability of the bank?
5. How effectively the bank has utilized its assets in generating interest earnings?

1.5 Objectives of the Study

The objective of the study is to examine and evaluate the financial performance of ADBL with the help of ratio analysis and other measuring tools. Besides, the following specific objectives are to support the evaluation and comparison of the efficiency and progress of this bank:

a. To analyze liquidity, leverage, profitability and ownership ratios of the bank.
b. To examine the income and expenditure statements of the bank.
c. To identify the deposit and loan and advances.
d. To examine the areas on which the banks have been utilizing their assets through the analysis of their financial performance.
e. To assess the fund mobilization and investment areas of the banks, which would contribute to draw their core strengths and areas to be worked on.

1.6 Limitations of the Study

This study has attempted to evaluate the financial performance of the ADBL. Every study has its own limitations. This study is also not an exception. The following are the limitations of the study:

a. This study has been carried out based on the published financial documents such as balance sheets, profit and loss accounts, related journals, magazines and books. These published documents have their own limitations.
b. The study has been based on the secondary data only.
c. The study has been focused on the financial performance of SCBNL with the help of financial tools.
d. It covers the financial performance of SCBNL for the periods from 2004/05—2009/10 only.
e. No comparison has been made with other commercial banks.
f. The conclusion drawn up from this study may or may not be applicable to other commercial banks in Nepal.

1.7 Importance of the Study

A Commercial bank is the bank, which deals in exchanging currency, accepting deposits, giving loans and doing commercial transactions. Therefore, the commercial bank acts as a pool between savers and users of money. It means the commercial bank collects fund in term of deposit capital etc. from savers and gives loan to the users of money. The bank either gives loans to the users or invest in different investment alternatives, such as corporate share debentures, government bond etc. out of its collected fund and makes profit.

The study plays vital role in the managerial decisions. Every organization has to analyze its financial performance in every step of its operation, promotion and expansion. This study helps to enhance the financial performance of the concerned organizations. This study will be useful and valuable for academicians, students, teachers, practitioners, individual person and any institutions in the field of accounting and finance.

1.8 Research Methodology

Research methodology is the way to systematically solve the research problem. It refers to the various sequential steps adopt by a researcher in studying the problem with certain objectives. It describes the method and process applied in the entire aspect of the study. In this chapter, the research design, data collection procedures and procedures concerning analysis of data are described thoroughly. Analysis is conducted by using appropriate financial and statistical tools and the findings are presented in a systematic way.

1.9 Organization of the Study

This research work has been divided into five chapters, i.e. Introduction, Review of Literature, Research Methodology, Data Presentation and Analysis and finally Summary, Conclusion and Recommendation.

Chapter I: Introduction

The first chapter includes background of the study, statement of the problem, objective of the study, significance of the study and limitation of the study.

Chapter II: Review of Literature

The second chapter incorporates review of theoretical and related literature regarding the subject matter publications of writers and researchers have been related to the topic.

Chapter III: Research Methodology

This chapter explains the research methodology used in the study, which includes research designs, nature and sources of data, data collection, data analysis technique and different statistical and financial tools used in the study.

Chapter IV: Presentation and Analysis of Data

This chapter deals with the major part of the study. This chapter includes presentation and analysis of data using different statistical tool, and major findings.

Chapter V: Summary, Conclusion and Recommendation

This chapter deals with summary and conclusion of the study and recommendations and suggestion regarding the subject matter.

Beside these bibliography and appendices have also been annex at the end of the thesis. Similarly, acknowledgment, table of contents, list of tables, list of figures abbreviation have been included in the beginning of this thesis report.

CHAPTER - II
REVIEW OF LITERATURE

Review of literature is an essential part of all studies. It is a way to discover what other research in the area of our problem has uncovered. A critical review of the literature helps the researcher to develop a thorough understanding and insight into previous research works that relates to the present study. It is also a way to avoid investigating problems that have already been definitely answered.

The purpose of the present chapter is to find out what research studies have been conducted in one's chooser field of study and what remains to be done. It provides the foundation for developing comprehensive theoretical framework from which hypothesis can be developed for testing. The literature survey also minimizing the risk of pursuing the trend ends in research.

2.1 Conceptual Review

Conceptual reviews are a type of intermediate theory that has the potential to connect to all aspects of inquiry. Conceptual reviews act like maps that give coherence to empirical inquiry. The review covers the area of research work and theoretical concepts developed by various scholars. This heading is also categorized under different headings, which are discussed as follows:

2.1.1 Commercial Bank

Commercial banks are the dominant financial intermediaries engaged in the collection of saving and providing loans as well as offering a wide variety of non-fund based financial services to the customers according their needs and preferences. They supply the financial needs of modern business by various means. They accept deposits from the public on the condition that they are repayable on demand or on short notice.

Commercial Banks are one of the most important institutions in the economy. The main function of commercial bank is to lend money to merchants, homeowners, farmers and industrialists and to hold Government bond. Commercial Bank is also working as intermediates between surplus-spending units to deficit-spending units.

Commercial banks are restricted to invest their funds incorporate securities. Their business is confined to financing the short-term needs of trade and industry such as working capital financing. They cannot finance in fixed assets. They grant loans in the form of cash credits and overdrafts. Apart from financing, they also render services like collection of bills and cheques, safe keeping, of the valuables financial advising etc. to their customers.

According to the commercial bank act 2031 “Commercial Banks are those banks which are established under this act to perform commercial function except those which are established for specific purpose like Development Banks, Co-operatives etc.”

“Ordinary banking business consists of changing cash for bank deposits and bank deposits for cash; transferring bank deposits from one person or corporation (one depositors) to another; giving bank deposits in exchange for bills of exchange, government bonds, the secured and unsecured promises of businessman to repay, etc”(Sayers, 1994:22).

”A banker is one who in the ordinary course of business honors cheque drawn upon him by persons from and for whom it receives money on current account” (Hat, 1996: 255).

The main aim of a commercial bank is to seek profit like any other institution. Its capacity to earn profit like any other institution. Its capacity to earn profit depends upon its investment policy. Its investment policy, in turn, depends on the manner in which it manages its investment portfolio. Thus “Commercial bank investment policy emerges from a straight forward application of the theory of portfolio management to the particular circumstances of commercial bank”. Commercial banks earn profit by proper mobilization of their resources. Many commercial banks have been established to provide a suitable service, according to their customers.

2.1.2 Financial Performance/Analysis

Financial performance analysis can be considered as a heart of the financial decision. The growth and development of any enterprises is directly influenced by the financial policies. Rational evaluation of the financial performance of the financial management in public enterprise is too much involved in record keeping, raising necessary funds and maintaining relationship with the bank or other financial institutions. But financial aspect is one of the most neglected aspects of public enterprises in Nepal. However commercial banks have analyzed financial performance for their corrective actions. But their analysis is limited within the banks themselves.

Financial performance as a part of the financial management is the main indicator of the success or failure of the firm. There are different persons/institutions that affect or are affected by the decision of the firm. Financial condition of business firm should be sound from the point of view of shareholder, debenture holders, financial institution and nation as whole. Though, the type of analysis varies according to the specific interest of the party involved, shareholders of the firm are concerned principally with the present and expected future earnings, the stability of the earnings as well as their variations with the earnings of other enterprises. This indicates that they concentrate their analysis on the profitability of the firm.

Ratio analysis is a powerful tool of financial analysis. A ratio is designed as "the indicated quotient of two mathematical expressions" and as "the relationship between two or more things". “Financial analysis is the process of identifying the financial strengths and weakness of the firm by properly establishing relationship between the items of the balance sheet and the profit and loss account”. In financial analysis, a ratio is used as a benchmark for evaluating the financial position and performance of a firm (Pandey, 1989:104).

“Financial analysis is the process of determining the significant operating and financial characteristics of a firm from accounting data and financial statement. The goal of such analysis is to determine the efficiency and performance of the firm’s management, as reflected in the financial records and reports. The analyst is attempting to measure the firm’s liquidity, profitability and other indications that business is conducted in a rational and orderly way. If a firm doesn’t achieve financial norms for its industry or relationships among data that seen reasonable, the analysts note the deviations. The burden of explaining the apparent problems may then be placed upon management” (Hampton, 2006: 98).

“Financial statement analysis includes the study of relationship within a set of financial statement at a point in time and with trends in these relationships over the time” (Foster, 2002: 58)

Effective management of working capital is one of the important aspects of the corporation to ensure the liquidity. Ineffective management of working capital put the company into serous liquidity crises and many other financial panics. ‘Most of the Nepalese corporations are facing the problem of working capital management. Hence, they are failure to maintain liquidity.” Dr. Mohohar K. Shrestha” has found in his study the fact that low paid up capital or inadequate provision of working capital poor inventory management and high accounts receivable contribute to creating liquidity problem in corporation in Nepal.

Financial performance of corporation is depends upon how effective plan and policy the firm has followed. Financial planning involves analyzing the financial flow of the firm as a whole forecasting the consequences of various investment financing and dividend decisions and weighing the effects of various alternatives. The idea is to determine where the firm has been where it is now, and where it is going not only the most likely course of events, but only the most likely course of events, but deviations from the most likely outcome. If things become unfavorable, the company should have a backup plan, so that it is not caught flat – fooled, without financial alternatives (Van Horne, 1988: 799).

It is useful to provide feedback information for drawing the attention of Management regarding what should be done for strengthen the financial performance. Hence, analysis of financial performance is a crucial part of financial decision-making process. Financial performance is evaluated from the standpoint of profitability, liquidity and solvency.

Financial performance as a part of the financial management is the main indicator of the success or failure of the enterprises. There are different personal institutions that are affected by the decision of the enterprises stockholders such as owners, managers, creditors, investors, customers; tax authorities etc are indirectly interested about the financial performance, of the enterprise. Though the type of analysis various according to the specific interest of the party involved. Shareholders of the enterprise are concerned principally with the present and expected future earning and the stability of the earning of other enterprises. This shows that they concentrate their analysis on the profitability of the enterprises. Management of the enterprises is interested in all aspects of financial analysis to adopt a good financial management system and for interested in the liquidity position to see the ability of the enterprises to pay their short term claims, long term creditors are more interested in the cash flow ability of enterprises to services debt over a long run. Similarly, all the concerned groups are interested either directly or indirectly about the financial performance of the company. Thus financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing the relationship between the items of the balance sheet and profit and loss account. In sum it is a process of evaluating the relationship between component part of financial statement to obtain a better understanding of a firm's position and performance. This statement is prepared in order to reveal clearly the various sources from where the fund are procured to finance the activities of a business concern during the accounting period this also brings highlight to the use in which these funds are put during the same period.

2.2 Review of Related Studies

It gives the detail information about different books, journals and thesis reviewed by the researcher. This section examines recent research studies that act as a basis for the researcher's study. The reviewed studies are defined as follows:

2.2.1 Review of Journals and Articles

Shrestha (1980), on "*Financial Management-Theory Practice*" has concluded that the bank has sufficient liquidity to meet the claim of depositors (excluding fixed deposits). The bank has a highly geared capital structure and is more depending on borrower funds. The bank has been able to meet the interest on deposits out of its profits. The rate of return on ownership capital is favorable. He further suggested that operational efficiency should be enhanced to achieve its higher profit goal for better performance.

Chopra (1990), in his article "*Role of Foreign Banks in Nepal*" conduced that the joint venture banks are playing an increasingly dynamic and vital role in the economic development of the country.

Gilles (1991), in his article "*The Role of Commercial Banks in Nepalese Context*" concluded that due to rapid competition in banking sector for public welfare, five commercial banks are improving their services issue.

Pradhan (1994), in his research "*Financial Management Practices in Nepal*" has studied about the major feature of financial management practices in Nepal. To address his issue, distributing a multiple questionnaire, which contained questions on various aspects of financial management practices in Nepal, carried out a survey of 78 enterprises. He found the among the several finance functions, the most important finance function appeared to be working capital management. While, the least important one appeared to be maintaining good relations which stockholders. The finding reveals that banks and retained earnings are the two most widely used financing sources.

Most enterprises do not borrow from one bank only and they do switch between banks to whichever offers best interest rates. Most enterprises find that banks are flexible in interest rates and covenants. He further found that among the bank loans, bank loans of less than one year are more popular in public sector where as bank loans of 1-5 years are more popular in private sector. In period's tight money, the majority of private sector enterprises fill that bank will treat all firms equally while public sector does not feel so.

Similarly he concluded that the majority of enterprises in trade sector find that banks, interest rate is just right while the majority in non-traded sector find that the same is one higher side.

Beaver (1996), in journal of "*Financial Ratio and Predictors Failure With Accounting Research*" tested the ability of financial ratios to predict failure. This study revealed five ratios, which could discriminate between failed and non-failed firms. The ratios are cash flow to total debt; net income to total assets; total debt to total assets; working capital to total assets and current ratios. It was obvious that failed firms had more debt and low return on assets. They had less cash but more receivable as well as low current ratios. The stock was low.

Horrigan (1996), in "*The Determination Of long Term Credit Standing with Financial Ratios"* article title *"An Empirical Research In Accounting" tested* the power of financial ratios to predict corporate bond ratings. His multiple regression analysis revealed that working capital to sales, net worth to total debt, sales to net worth and net operating profit to sales were best for predicting bond rating.

Dambolena and Khoury (1980), in *"Ratio Stability and Corporate Failure"* analyzed that as about the stability of all financial ratios overtime, as well as the level of their ratios as explanatory variables in the derivation of a discriminate function. The data were collected from 68 firms half of them failed and half of them didn't fail. By using the profitability ratio activity and turnover ratio, liquidity ratio and indebtedness ratios he found that the standard deviation of ratio over times appeared to be the strongest measure of ratio stability and the ratio of net profit to sales, net profit to total assets, funded debt to net working capital, total debt to net working capital and fixed assets to net worth have shown to be relevant in predicting corporate failure.

Barjracharya (1990), in *"Monetary Policy and Deposit Mobilization in Nepal"* states that the mobilization of the domestic saving is one of prime objective of the monetary policy in Nepal and commercial banks are the most active financial intermediary for generating resources in the form of deposit of private sector and providing credit to the investors in different sectors of the economy.

Boyd and Nicolo (2005), in *" The Theory of Bank Risk Taking and Competition Revisited,"* explained that when confronted with increasing competition moral hazard is exacerbated and bank intentionally take on more risk , shown that a positive relationship between the number of bank competitors and risk seeking is fragile. In particular it makes an enormous difference when one allows for the existence of loan markets and requires that there be the same number of banks competing for both deposits and for loan. They assumed that borrowers entirely determine project risk conditional on the loan rate set by banks. In effects bank a raised portfolio problem and transform it into a contracting problem with moral hazard. Without structure, banks use increasing market power to raised loan rates and when confronted with increased funding cost, borrowers optimally choose higher risk projects.

Pant (2006), in *"Nepal Membership in WTO and Financial Service Sector"* explain that Globalization and Liberalization have flounced across the world no longer it is choice but reality. A financial service is the key sector that underpins global economic growth and plays a major role in the development of infrastructure for trade in goods and services. Liberalization of trade in goods and services, when undertaken in conjunction with transparent and strong regulatory regimes, benefits countries in many ways, with this said, there is mammoth proportion to gain for Nepal from the liberalization of the financial sector. But insurgency and the political instability have raised the risk for foreign investors to invest in the country. Risk rating of Nepal is at the highest degree.

Pradhan (2006), in *" Opportunities and Challenges on WTO Accession in Insurance and Banking and Financial Services in Nepal"* explained that Nepal is scheduled to open its banking sector to foreign competition by 2010 A.D. Banking community needs to accepts the challenges and be prepared to enter into global market with proper strategic plan. In order to grab the opportunities, banking sector need to explore geographical comparative advantage for providing financial services globally. International financial center could be established and explored. Similarly, in order to strengthen them domestic financial institutions and to expand the business, merger, acquisition, management contracts, technical service and management agreement can explore. Regional, Bilateral and multilateral integration have already created foundation for global integration, which needs to be continuously strengthened in the future too.

The key of integration today is to accept fair competition and achieve development benefit. Therefore, the banking industry should be prepared to accept the challenges concerned and explore the opportunities contained therein by enhancing capita

Norris (2007), in *" Be Cautious While Licensing a New Foreign Bank"* studied about the possible impact of foreign banks setting up their branches here said if proper regulations are not made by Nepal Rasta Bank, then the Nepali banks stand to lose a lot.

Banks have been assuming that when foreign banks come in, they will only be interests in wholesale lending. But if the right rules are not set in place, nothing will stop foreign bank, going into the retail sector. They might do bank going into the retail sector. They might do it just to kill off competition and monopolies' the Nepali retail sectors, which is profitable given the number of bank making profit in retail business currently. The solution suggested is to adopted policies to prohibit foreign banks from entering the retail sector.

2.2.3 Review of Related Thesis

Joshi (2003), conducted her master's thesis on *" A Study of Financial Analysis of Nepal Investment Bank Limited"* had a main objectives to evaluate the overall financial position examine liquidity, profitability and ownership ratio and to study the income and expenditure statement of the Bank. On the basis of various analyses, the researcher came out with the following conclusion. The current ratio of the bank over the study period is 1.09 times on average. Therefore the liquidity position NIBL is in normal standard. The cash and bank balance proportion with respected to the current asset is moderate since the average ratio is 10.17%. The result of the analysis indicates that the share of fixed deposit is high in the total deposit.

Saving deposits stand mid way between current and fixed deposits. The analysis indicates that the cash reserve as bank is more than required. Hence, in general this liquidity position of the bank is good enough to meet the short- term obligation. The debt equity ratio of bank is high, which means the creditors have invested more in the bank than the owners. Interest earned in comparison to the assets is inadequate. Net profit earned in comparison to the total deposit is relatively low. The result of the analysis indicates that the net profit earned in comparison to total assets is fluctuating. Profit earning and the shareholder's equity of NIBL are better. In general the profitability ratios of the bank indicate that the overall performance of the bank is effective in maximizing the wealth. The activity ratio of bank indicates that it had utilized its resources in the best possible way to maximize its wealth. Because the bank has succeed to utilize total deposits in profit generating purpose and the bank had mobilized its total deposit in loans and advance satisfactory. The EPS of the bank is quite good because through the EPS had fluctuate its average stands 54.16% during the study period. The proportion of earning distributed to the shareholder per share is very low and they are being compensated very slowly. DPR of the bank is decreasing and very low.

Luintel (2003), conducted his master's thesis on *"A Study on Financial Performance of Nepal Bank Limited"* with main objectives to evaluate the bank's efficiency to face the challenges and measure the comparative financial strength and weakness and analyze the banks performance under priority sectors of government. And concluded that the Nepal Bank Limited has not maintained a balanced ratio among its deposit liabilities during the last five year period. Operating profit for some year has gone negative. The study period at an average showed negative net profit.

The only positive aspect is if risk can be managed, percentage of loan and advance on total deposit has increased. But due to the bank's failure in collecting earned interest and matured loan, it has suffered continuous loss. The net worth for some year is negative due to the heavy loss during the year long-term debts, total debts and total deposit ratios have gradually decreased. It indicates that bank has not followed any experienced negative EPS and P\E ratio have also heavily fluctuated during the study period. Thus, it can be said the financial position of the NBL is worse due to its failure to utilize its resources efficiently and due to worse management.

Pokharel (2004), conducted his master's thesis on *"Financial Assessment of Joint Venture Bank in Nepal"* had main objectives to analyze the liquidity, examine the profitability position and find out the market price position of the joint venture banks, and conducted that current ratio of NSCB is more significant to meet the short-term obligation than other joint venture bank. Cash and bank balance to deposits and bank balance to deposits (excluding fixed deposits) ratio of NSBI has very sound position for ready to serve against its customer deposits than others TVC. It indicates that NSBI has followed conservative working capital policy and selective lending policy whereas other JVBs have followed aggressive working capital policy and they have invested more assets for income generating purpose. Similarly NSCB has high net profit to total assets ratio, net profit to total deposits ratio, return on net worth ratio, return on loan and advance ratio, earning per share

Darshandhari (2005), conducted his master thesis on *"Financial Performance Analysis of Everest Bank limited"* had a major objectives to evaluate the earning generating capacity and analyze the liquidity, turnover and profitability of the EBL and conducted that current ratio of the bank over five year is 1.03 times on a average. It indicates that the margin for safety for customers has not been maintained satisfactorily. The average of cash and bank balance to current assets ratio is 14.26 percent that indicates that the cash and bank balance proportion with respect to the current assets is moderate. The ratios for loan and advance to current assets have been lent to the customers as loan and advances. The result of the analysis indicates that the share of fixed deposit is high in the total deposit, which may be termed as favorable one from viewpoint of liquidity. Cash and bank balance has been maintained properly against anticipated calls of its depositors. Hence, in general the liquidity position of the bank is good enough to meet the short-term obligation.

The researcher found that the operating efficiency of the bank is fair enough. Interest earned in comparison to total assets is not fair enough; this might be the reason that the bank has average operating profit. Interest paid to total assets is relatively low which is good from viewpoint of profitability. Net profit earned in comparison to total assets and total deposit is relatively low.

Banskota (2006), conducted his master's thesis on "*Analysis of Financial Performance of Himalayan Bank Limited"* had main objective to examine the financial statement of the bank and analyze them to see the financial; soundness, reached to the conclusion that the bank had utilized their resource in proper order in profit generating sectors. Therefore, there is no doubt that banking has been operating smoothly and succeeds in becoming the pillars of economic system of the country. Banks has direct contribution to the economic field which includes high amount of the corporate tax paid by it, good dividend to the shareholder and employment to the qualified personals in order to make them equipped with all the technical knowledge of banking.

Shrestha (1993), in her research, "*Investment Planning of Commercial Banks in Nepal*", has made remarkable efforts to examine the investment planning of commercial banks in Nepal. On the basis of the study she concludes that bank portfolio (loan and investments) of commercial banks has been influenced by the variable securities rates. Investment planning of commercial banks in Nepal is directly traced to fiscal policy of government and heavy regulatory procedure of the central bank (NRB). So the investments are not made in professional manner. Investment planning and operation of commercial banks in Nepal has not been found satisfactory in terms of profitability, safety, liquidity, productivity and social responsibility. To overcome this problem, she has suggested, "commercial banks should take their investment function with proper business attitude and should perform lending and investment operation efficiently with proper analysis of the projects."

Lamsal (2004), in his thesis paper entitled "*A studies of commercial banks deposits and its utilization*" had made an attempt to highest the discrepancy between resources collection and the resources utilization. He concluded that commercial banks failure in resources utilization is due to their lending confined for short-term only. So he recommended that commercial banks should give emphasis also on long term lending for better utilization of the deposits.

Shrestha (2006), through his thesis "*A study on financial performance of commercial banks*" concluded that the liquidity position of commercial bank is satisfactory local commercial banks have been found relatively highly leveraged compared to the joint venture banks. Loan and advances have been their main form of the investment. Two third assets have been used for earning purpose. The profitability position of NABIL is stronger than others.

CHAPTER - III

RESEARCH METHODOLOGY

Research is a systematic and organized effort to investigate a specific problem that needs a solution (Sekaran, 1992). This process of investigation involves a series of well-thought-out activities of gathering, recording, analyzing and interpreting the data with the purpose of finding answers to the problem. Thus, the entire process by which we attempt to solve problems or search the answers to question is called research. We can define research as an organized, systematic, database and critical scientific inquiry of investigation into a specific problem, undertaken with the objective of finding answer or solution to it.

Research methodology refers to the various sequential steps to be adopted by a researcher in studying a problem with certain object in view. Research methodology describes the methods and process in the entire aspect of the study. In other words, research methodology is a systematic way to solve the research problem. It refers to the various sequential steps to be adopted by the researcher in studying the problems with certain objectives. It is the methods or process applied to solve the defined research process. A focus is given to research design, sample selection, data collection procedures, data processing, etc.

The basic objective of the study is to evaluate the financial performance of Agriculture Development Bank. In order to reach and accomplish the objectives, the following methodologies have been adopted which includes research design, sources of data, data collection, analysis technique and so on.

3.1 Research Design

Research design is the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance. The plan is the overall scheme or program of the research. It includes an outline of what the investigator will do from writing the hypotheses and their operation to the final analysis of data. The structure of the research is more specific. It is the outline, the scheme and the paradigm of the operation of the variables (Kerlinger, 1986: 275).

Research design is like a philosophy of life; no one is without one, but some people are more aware of theirs and thus able to make more informed and consistent decisions. Every type of empirical research has an implicit, if not explicit, research design. Because a research design always exists, it is important to make it explicit, to get it out in the open where its strengths, limitations and implications can be clearly understood (Maxwell, 1996:3-4).

To achieve the objectives of this study, descriptive and analytical research design has been used. This study is based in past data of bank. The research methodology is based on the secondary type of data. Some financial and statistical tools have been applied to examine facts. Descriptive techniques have been adopted to evaluate the financial performance of ADBNL.

3.2 Nature and Sources of Data

Data may be obtained from several sources. Each research project has its own data need and data sources. This study is conducted mainly in the basis of secondary data. The data required for the analysis are directly obtained from the balance sheet and P/L account of concerned bank's annual reports. Some supplementary data and information are collected from the periodicals, economic journals, managerial magazines and other published and unpublished reports and documents from various source and web sites.

3.3 Data Collection Technique

The required financial data and information have been collected from the balance sheet and profit and loss account of the bank. Secondary data are collected through the annual report of ADBNL, which were collected from concerned bank, and other reports were downloaded from websites. Various publication of NRB was collected from concerned department of NRB.

Beside the above stated sources of data detailed reviews of literature have been conducted for the purpose of collecting other relevant data and information. Such data and information and other reference materials were collected from libraries of Shanker Dev Campus and Central Library T.U. that helped a lot in conducting the study.

3.4 Data Analysis Technique

The balance sheet, income statements and profit and loss accounts of the company for 5 years create from 2061/062 are collected for the convenience of the study. The major tool employed for the analysis of this study is the ratio analysis that established the quantitative relationship of two variables of the financial statements. Ratio Analysis is the basic tool used for the study and is considered to be the powerful tool of financial analysis. Beside ratio analysis, various other financial, statistical and accounting tools have been used to achieve the objective of the study.

3.4.1 Financial Tools

Financial analysis is used to determine the relative strengths and weakness of a company. Financial analysis involves a study of the relationships between the items of income statement, cash flow statement, profit and loss account and balance sheet. Ratio Analysis is the basic tool used for the study. It refers to the numerical or quantitative relationship between two items or variables. These tools are used for the analysis and interpretation of financial data.

3.4.1.1 Liquidity Ratios

The liquidity ratios measure the ability of a firm to meet its short-term obligation. It reflects the short-term financial strength of the business. These ratios are used to know the capacity if the concern to repay short-term liability. Short-term creditors are generally very interested in the liquidity ratios. Higher liquidity levels indicate that we can easily meet our current obligations.

The following are the different ratios which are calculated under liquidity ratio:

a) Current Ratio

The current Ratio is the ratio of total current assets to total liabilities .It is calculated by dividing current assets to current liabilities which is presented as follows;

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

Current assets are those assets, which are convertible in cash within a year or so. They include cash and bank balance, investment in treasury bills, money at short call or placements, short term loans and advances bill purchased and discounted, overdrafts, bills for collection, prepaid expensed, other receivables etc.

Current liabilities are those obligations maturing in the year. It includes current account deposit, saving account deposit, margin deposits call deposit, intra-bank reconciliation account, bills payable, bank overdrafts, provisions, accrued expenses, bills for collection, customers acceptance liabilities etc.

A low current ratio would imply possible insolvency problems. A very high current ratio might imply that management is no investing idle assets productively. Generally, we want to have a current ratio that is proportional to our operating cycle. We will look at the Operating Cycle as part of assets management ratios.

b) Cash and Bank Balance to Current Asset Ratio

Cash and bank balance is the most liquid form of the current assets. The cash and bank balance ratio indicates the percentage of readily available funds within the bank. The cash and bank balance to current asset ratio is calculated by using the following formula:

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

c) Loan and Advances to Current Assets Ratio

Bank loans and advances are the main assets used as a source of income in the commercial banks. This ratio shows the proportion of current assets, which are invested as loans and advances to generate the income. It is expressed as:

$$\text{Loan and Advances to Current Assets Ratio} = \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

d) Cash and Bank Balance to Current and Saving Deposit Ratio

It measures the ability of the bank to meet its immediate obligations. The bank should maintain adequate cash and bank balance to meet the unexpected and heavy withdrawal of deposits. Cash and bank balance comprises cash in hand, foreign cash in hand cheques and other cash items, balance with domestic bank and balance held in foreign banks. Current and saving deposits consist of all types of deposit excluding fixed deposits. This ratio is calculated by dividing cash and bank balance by current and saving deposits as follows.

Cash and Bank Balance to Current and Saving Deposit Ratio

$$= \frac{\text{Cash and Bank Balance}}{\text{Current and Saving Deposit}}$$

The ratio shows the ability of banks immediate funds it cover their current and saving deposits. Higher ratio shows higher liquidity position and ability to cover the deposit and vice versa.

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

This ratio is calculated by dividing cash and bank balance by total deposit.

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

Total deposit consists of current deposit, saving deposit, fixed deposit, money at call and short notice and other deposits. The ratio 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.

f) Saving Deposit to Total Deposit

Saving deposits is the low interest bearing deposit than the fixed deposit. These deposits are not as freely withdrawal as current deposit. This ratio is calculated in order to find out the proportion of total deposit which is interest bearing and short-term. It can be calculated by dividing the amount of saving deposits by the amount of total deposits. It is expressed as:

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

3.4.1.2 Activity/Assets Management Ratio

Assets management ratios which measure how effectively a firm is managing its assets and whether the level of those assets is properly related to the level of operations as measured by sales. Its measures how effectively the company employs the resources at its command. Funds are creates by the collection of shares as well as debt from the owner, creditor and outside parties. Those funds are invested in procuring various kinds of assets to generate profits or income. Activity ratios, thus, involve a relationship between sales and assets. We can say that activity ratios show the working efficiency of the assets to measure sales. Higher the ratio is an indicator of improved efficiency of resources and lower the ratio is an indicator of inefficiency of resources for sales activities. The following are the different ratios, which are calculated under activity ratio:

a) Loan and Advances to Total Deposit Ratio

This ratio measures the extent to which the banks are successful to utilize the outsiders' fund (Total Deposit) for the profit generating purpose on the loan and advance.

Generally, a high ratio reflects higher efficiency to the utilization of fund and vice versa. This ratio is also called as credit deposit ratio (C D ratio). This ratio can be expressed as:

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

b) Loan and Advances to Fixed Deposit Ratio

This ratio indicates how many times the amount is used in loans and advances in comparison fixed deposits. Fixed deposits are the main source of deposit of bank and are high interest bearing obligation whereas loans and advances are major sources of investment to generate income for the commercial banks. This ratio is calculated by dividing the amount of loans and advances by fixed deposit that is given below.

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

c) Loan and Advances to Saving Deposit Ratio

Loans and Advances to saving deposit ratio measures what extent saving deposit have been turned over to loan and advances and how successfully the deposit has been mobilized on loan and advances for the purpose of profit maximization. It is compute as

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

d) Total Investment to Total Deposit Ratio

Investment is one of the major sources of earning money. This ratio includes how properly firms' deposits have been invested on government securities, shares and debentures of other companies and other types of investments. This ratio can be computed diving total amount of investment by total amount deposit collection, which can be shown as:

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

e) Performing Assets to Total Assets Ratio

This ratio measures what portion of assets has been funded for income generation.

Performing assets includes loans and advances; bills purchased and discounted investment and money at call or short notice. This ratio is calculated by dividing performing assets by total assets as follows.

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

f) Performing Assets to Total Debt Ratio

This ratio shows the pattern of use of the fund collected from the outsider. High ratio shows the success of the bank in utilization of creditors fund in productive areas. Low ratio shows idleness of the cost bearing resources.

This ratio is calculated by dividing performing assets to total debt as follows.

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

g) Non Performing Loan Ratio

It is noted that the stability of the banking system cannot be ensured unless and until the banks and financial institutions run in the prudent and sound manner. Banks cannot maintain their financial health if there are a lot of defaulters on its portfolio of loans and advances. A lot of defaulters in the loan portfolio indicate poor and weak health of the institution.

$$\text{Non-Performing Loan Ratio} = \frac{\text{NPA}}{\text{TLA}}$$

Where NPA = Non-Performing Assets (Loans and Advances)

TLA = Total Loans and Advances

3.4.1.3 Leverage Ratio

This ratio is also called solvency ratio or capital structure ratio. A firm should have strong short term as well as long-term financial position. To judge the long-term financial position of the firm, these ratios help to measure the financial contribution of owner and creditors comparatively. These ratio indicates the situation of the capital structure, which is calculated to measure the company's ability of using debt for benefit of shareholders long term creditors like debenture holder, financial institution etc. are interested to the firm's long term financial health, debt serving capacity and strength and weakness of the concerns. This ratio maybe calculated from the balance sheet items to determine the proportion of debt in total financing. In summary debt ratio tell us the relative proportions of capital contribution by creditors and owners.

Leverage Ratio reveals the extent to which a bank relies on debt. Any bank with higher leverage ratio indicates a more riskiness in its position. It is because the interest payment on debt is fixed but the earnings of the bank fluctuate. If the earning of the bank diminishes excessively, the dank might miss its debt payment and finally may lead the bank to bankrupt. Hence, the financial leverage is the magnification of both risk and return through introducing fixed cost financing like debt. There are following ratios to measure the leverage.

a) Debt to Assets (D/A) Ratio

This ratio shows the portion of outside fund that the bank financed with debt. This ratio implies a finance company success in exploiting debt to more profitable areas. This ratio is presented as follows.

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

Total debt includes both current liabilities and long-term debt. It also provides security / financial safety to outsider i.e. potential shareholder, depositor or investors. Higher debt ratio indicates higher financial risk as well as decreasing claims of outsider over the total assets of the firm.

b) Debt to Equity Ratio

This ratio shows the relationship between the firm's debt and equity financing. It is a test of long-term solvency of a firm. It is related to shareholders fund indicating the degree of protection against long-term creditors. It measures creditor's claims against owners. It can be shown as;

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

A high ratio is more risky than low ratio. Higher ratio shows that, more of the funds invested in the business are provided by the outsider. The lower ratio shows that, more of the funds invested in the business are provided by the owner. High ratio shows that the creditors' claims are greater than those of owners.

c) Interest Coverage Ratio

The interest coverage ratio or the time interest earned is one of the most conventional coverage ratio used to test the firm's debt servicing capacity. The interest coverage ratio shows the number of times the interest charges are covered by funds that are ordinarily available for their payment.

The ratio of earnings before interest and taxes (EBIT) to interest charges, measures the ability of the firm to meet its annual interest payments. The interest coverage ratio is computed by dividing earnings before interest and taxes (EBIT) by interest charges.

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Charge}}$$

This ratio indicates the ability of bank to pay interest out of its profits. It is also indicates the extent to which the profits of the company may decrease without in any way affecting its ability to meet its interest obligations. Higher ratio is desirable but too high ratio indicates the firm is very conservative in using debt and that it is not using credit to the best advantage of shareholders. A lower ratio indicates excessive use of debt or inefficient operations. The bank should make efforts to improve the operating efficiency, or to retire debt to have a comfortable coverage ratio.

3.4.1.4 Profitability Ratios

Profit is the difference between total revenues and total expenses over a period of time. Profit is the ultimate output of a commercial bank and it will have no future if it fails to make sufficient profits. Therefore, the financial manager continuously evaluates the efficiency of the bank in terms of profits. Profitability ratios measure the success of the firm in earning, net return on sales or on investment. A profitability ratio shows the combined effects of liquidity, assets management, debt management on operating result and the overall efficiency of the business concern. Higher the profitability ratios better the financial performance of the bank and vice versa. Profitability ratio can be calculated by following different ratio.

a) Return on Total Assets

This ratio measures the productivity of the assets. It shows the relationship of net profit and total assets and determines how efficiently the total assets have been used by the management. This ratio evaluates the overall return on investment earned by the firm. This ratio indicates the ability of generating profit per rupees of total assets. It also evaluates the present return on the total assets as a guide for return ratio shows the more efficient operating of management and lower the ratio shows the low efficient operating of management. The ratio is computed by;

$$\text{Return on Total Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}}$$

b) Return on Shareholder’s Equity

The ratio shows the relationship between the net incomes to fund actually contributed by the owner of the bank. In other words, the ratio measures how much of amount flowing to the shareholders in their equity investment. The ratio is calculated by dividing net profit by total equity capital (net worth).

This can be computed as;

$$\text{Return on Shareholder's Equity} = \frac{\text{Net Profit After Tax}}{\text{Total Shareholder's Equity}}$$

c) Interest Earned to Total Assets Ratio

Interest earning is the major source of a commercial bank. This ratio reflects the extent to which the banks are successful in mobilizing its total assets to generate high-income interest. A high ratio indicated high earning power of the bank on its total working fund and vice versa. Total assets represent total working fund of the bank. This ratio is calculated to find out percentage of the interest earned in comparison to total assets. It can be computed as;

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

d) Return on Loan and Advances Ratio

Return on loan and advances ratio shows how efficiency of the Banks and finance companies have utilized their resources to earn good return from provided loan and advances. This ratio is computed to divide net profit/loss by the total amount of loan and advances. It can be mentioned as;

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

e) Return on Total Deposit Ratio

The collected deposits are mobilized in investment and loans to get profit. This ratio indicates the percentage of profit earned by using the total deposit. It shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio indicates proper utilization of total deposit and vice-versa. The ratio is calculated by dividing net profit after tax by total deposit as follows.

$$\text{Return on Total Deposit} = \frac{\text{Net Profit after Tax}}{\text{Total Deposit}}$$

f) Total Interest Expenses to Total Interest Income Ratio

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, overdraft and government securities, interbank and other investment. Lower ratio is favorable from profitability point of view. This ratio is calculated by dividing total expenses by total interest income as follows.

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

g) Net Interest Margin

Net interest margin measured the net return on the bank's interest earning assets takes as investment. Loan and securities investment are the major components of earning assets of the commercial bank. Net interest margin is calculated by dividing net interest income by interest earning assets.

$$\text{Net Interest Margin} = \frac{\text{Net Interest Income}}{\text{Interest Earning Assets}}$$

* Net Interest Income = Total Interest Income – Total Interest Expenses

Interest Earning Assets = Securities Investment + Loans

h) Net Non-Interest Margin Ratio

Net non-interest margin is the ratio of net non-interest income to bank's interest earning assets. The net non-interest income is non-interest revenues minus non-interest expenses. Non-interest revenues are the fees generated from providing various services and non-interest expenses are the costs including wages, salaries, repair and maintenance, provision for loan losses, etc. Generally the bank's non-interest cost exceed over the non-interest revenues, so many banks have negative net non-interest margin.

$$\text{Net Non-Interest Margin Ratio} = \frac{\text{Net Non-Interest Income}}{\text{Interest Earning Assets}}$$

Where,

Net Non-interest Income= Non-interest Income – Non-interest Expenses

Interest Earning Assets= Securities Investment + Loans

i) Net Profit Margin Ratio

The profit margin of bank reflects effectiveness in control in expenses as well as service pricing policies. It measures a bank's ability to control expenses and thus its ability to produce net income from its operation revenue (income). The ratio reveals how much of net income a bank is generating on each rupee of operating revenue. It can be computed as;

$$\text{Net Profit Margin Ratio} = \frac{\text{Net Income}}{\text{Operating Income}}$$

j) Net Operating Margin Ratio

Net operating margin shows the proportion of net operating revenue to the total assets of a firm. It measures how efficiently operating revenue are generated by a bank. High ratio indicates high performance to mobilize their funds. It is appropriate for the comparative study to compute the net operating profit to total asset ratio rather than the return on assets ratio. This ratio is useful to measure the profitability ratio before interest and taxes of all financial resources invested in the bank's assets. The following formula has been used to calculate the net operating profit to total asset ratio:

$$\text{Net Operating Margin} = \frac{\text{Total Operating Revenue} - \text{Total Operating Expenses}}{\text{Total Assets}}$$

k) Assets Utilization Ratio

This ratio measures the degree of revenue generate by the utilization of total assets of a firm. It measures the productivity of the assets. It shows the relationship of operating revenue and total assets and determines how efficiently the total assets have been used by the management. This ratio evaluates the operating revenue on investment earned by the firm.

It can be calculated as follows.

$$\text{Assets Utilization Ratio} = \frac{\text{Total Operating Revenue}}{\text{Total Assets}}$$

l) Operating Efficiency Ratio

Operating efficiency ratio measures how efficiently the management is able to mobilize the resources in a firm. It shows the relationship between operating revenue and operating expenses. Higher ratio means the operating expenses are excess to the operating revenue. Thus, lower ratio is better. Operating efficiency ratio is calculated by dividing total operation expenses by total operating revenue.

$$\text{Operating Efficiency Ratio} = \frac{\text{Total Operating Expenses}}{\text{Total Operating Revenue}}$$

m) Staff Expenses to Total Income

Staff expenses include the salary and allowances, contribution to the provident fund and gratuity fund, staff training expenses and other allowances and expenses made to staff. It measures the proportion of income spent for the staff whose contribution is of great significance on the success of the bank. This ratio is calculated by dividing staff expenses by total income as follows.

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

3.4.1.5 Assets Quality Ratio

Assets quality ratio measures the turnover of economic resource in terms of quality. Only the investment is not of great significance by the return form them with minimum default in payment by debtors is significant. A firm may be in state of enough profit but unable to meet liabilities. Asset quality ratios are intended to measure the quality of assets contained by the bank.

a) 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 must if its loans and advances in secured sector.

This ratio is calculated by dividing loan loss provision by total income as follows:

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

b) Loan Loss Provision to Total Deposit Ratio

This ratio shows the proportion of banks income held as loan loss provision in relation to the total deposit collected. Higher ratio means quality of assets contained by the banks in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector.

This ratio is calculated by dividing loan loss provision by total deposit as follows.

$$\text{Loan loss provision to total deposit ratio} = \frac{\text{Loan Loss Provision}}{\text{Tota Deposit}}$$

c) Loan Loss Coverage Ratio

Loan loss coverage ratio is calculated by dividing provision for loan loss by total risk assets as follows.

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

Risk assets consists loans and advances, bill purchased and discounted. NRB has directed commercial banks to maintain provision for loan loss on the basis of category of loans and risk grade. Therefore the ratio 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.

d) Accrued Interest to Total Interest Income Ratio

Accrued interest refers to the interest that is accrued but not cancelled. Total interest income includes the interest received from the investment in various sectors. High ratio indicates the larger portion interest remained be collected. Lower ratio reflects the better quality of assets in the bank. This ratio is calculated by dividing accrued interest by total interest income as follows:

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

3.4.1.6 Market Value Ratios

It is related to the firm’s stock price to its earnings and book value per share, and thus gives management an indication of what investors think of the company’s past performance and future prospects. These ratios attempt to measure the economic status of the organization within the marketplace. Investors use these ratios to evaluate and monitor the progress of their investments.

The true owners of business firms are the common stockholders, who invest their money in the firm because of their expectation of future returns. The common stockholders are referred as a residual owner, who receives what is left after all other claims on the firm's income and assets have been satisfied. As a result of this generally uncertain position, the common stockholder expects to be compensated with adequate dividends and ultimately capital gains. From the point of view of the shareholders, the following financial ratios indicate the financial performance of the firm in a given period of time.

a) Earnings Per Share (EPS)

It measures the profit available to the equity shareholders on per share basis, i.e. the amount that they can get on each share held. In other words, this ratio measures the earning available to equity shareholders on a per share basis. The objective of computing this ratio is to measure the profitability of the firm on per equity share basis. It is the most important determinants of a common stock’s value because it measures the earning power under each share of stock. A high EPS in comparison to other competing firms is desirable. It can be calculated by the following formula;

$$\text{Earnings per Share} = \frac{\text{Earning Avaliable to Commom Shareholders}}{\text{No. of Equity Share Outstanding}}$$

b) Dividend Per Share (DPS)

Net profit after preference dividend is earning available to equity shareholders but whole earning is not distributed as dividend to shareholders, so that earning per share and dividend per share is not equal. The amount of earning distributed and paid as cash dividend is considered as dividend per share. It gives financial soundness of the company. Only financial strong companies can distribute dividend. Higher DPS shows the efficiency of management and vice versa. So, the shareholder prefer high dividend. It may sometime to wise to distribute less amount of profit if investment opportunities are available. This ratio is calculated as;

$$\text{Dividend per Share} = \frac{\text{Earning Paid to Shareholders}}{\text{No. of Equity Share Outstanding}}$$

c) Price Earnings Ratio (P/E Ratio)

The ratio of the market price per share to earnings per share. It shows the rupee amount investors will pay for Rs.1 of current earnings. The P/E ratio indicates the expectations of the equity investors about the earnings of the firm, the investor's expectations are reflected in the market price of the share and therefore the P/E ratio gives an idea of investors' perception of the EPS. The P/ E ratio is one of the most widely used measures of financial analysis in practice. Company having high and growth prospects have high P/E ratio as compared to no growth or slow growth firms. It can be calculated as follows;

$$\text{Price Earnings Ratio} = \frac{\text{Price Per Share}}{\text{Earning Per Share}}$$

d) Dividend Payout Ratio (DPR)

A ratio between dividends per share (DPS) to earning per share to earnings per share (EPS) is known as dividend payout ratio. It can be computed by the following formula;

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

e) Book Value Per Share (BVPS)

Book value per share is the value of a share of common stock that is determined by the balance sheet. It is calculated by dividing shareholders equity by the number of share outstanding. Where, shareholder's equity is the sum of all accounts of the owner's i.e. common stock plus share premium plus retained earnings.

$$\text{Book Value per Share} = \frac{\text{Shareholders Equity}}{\text{No. of Equity Share Outstanding}}$$

Higher ratio indicates the higher value of a share of common stock in the balance sheet. It should be higher than par value for a profitable company.

3.4.2 Accounting Tools

3.4.2.1 Income and Expenditure Analysis

Income and expenditure are the main indicators of the financial performance of the business firm. The income and expenditure statement provides a financial summary of the firm's operating results during the period specified. Therefore, the attempts have been made to analyze the income and expenditure statement of Agriculture Development Bank Nepal Limited of five financial years from 061/062 to 065/066 to know the financial performance of the bank. In this study the analysis of operating income and expenditure has been made as per the following details;

a) Operating Income

The sources of operating income are interest earnings, exchange earnings, commission earnings and other operating incomes.

b) Operating Expenses

The expenditure heads of the bank are interest expense, personnel expense and other operating and non-operating expenses.

3.4.3 Statistical Tools

Facts and figures about any phenomenon whether it relates to population, production, sales, profit or any other matters are called 'statistics'. Statistical tools help to find out the trends of financial position of the bank. It also analyzes the relationship between variables and helps banks to make appropriate investment policy regarding to profit maximization and deposit collection, fund utilization through providing loan & advances or investment on other companies. Ranges of statistical tools are also used to analyze the collected data and to achieve the objectives of the study. Simple analytical tools such as standard deviation, Karl Pearson's coefficient of correlation, and trend analysis adopted which are as follows:

3.4.3.1 Arithmetic Mean ($\overline{X}$)

The arithmetic mean is the most commonly used measure of central tendency. It represents the entire data by a single value. Its value is obtained by adding together all items and by dividing this total by the number of items. The purpose of computing the average value for set of observation is to obtain a single value, which is representative of all the items and which the mind can grasp simply and quickly. The single value is the point of location around which the individual items cluster. Since, average reduce the mass of data to a single figure, they are very useful for the purpose of making comparative study. It is calculated as;

$$\text{Mean } (\overline{X}) = \frac{\Sigma X}{N}$$

Where,

ΣX = Sum of observation ($X_1+X_2+X_3+\ldots\ldots\ldots\ldots..+X_n$)

N = Number of observation

3.4.3.2 Coefficient of Correlation (r)

Karl Pearson's correlation coefficient denoted by "r" measures the intensity or magnitude or degree of relationship between the two variables. We examine the relation between the various variables. If between two variables, increase or decrease in one causes increase or decrease in another then such variables are correlated variables. The measure of correlation called the 'correlation coefficient' summarizes in one figure, the degree and direction of movement. The correlation analysis only helps in determining the extent to which the two variables are correlated but it does not tell us about cause and effect relationship. The reliability of the value of coefficient of correlation is measure by probable error. Coefficient of correlation interprets whether or more variables are correlated positively or negatively. Its value lies between 1 to –1. This tool analysis the relationship between those variables of the bank, which are helpful to make appropriate decision regarding deposit collection, fund mobilization and profit maximization. The Karl Pearson coefficient of correlation (r) is given by the following formula:

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

Where,

r = Coefficient of Correlation

N = number of observation in series X and Y

$\sum X$ = Sum of observation in series X

$\sum Y$ = Sum of observation in series Y

$\sum XY$ = Sum of product of observation in series X and Y

ΣX^2 = Sum of square observation in series X

ΣY^2 = Sum of square observation in series Y

3.4.3.3 Probable Error (PE)

By using probable error, we can measure whether the calculated correlation coefficient is reliable and significant or not.

Probable error can be computed by using the following formula:

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

Where,

r = correlation of coefficient

n = no. of pairs of observation

This is used to test whether the correlation between the variables is significant or not in the following ways.

If r < PE, it is insignificant, no evidence of correlation.

If r > 6xPE, it is significant

In other than these cases nothing can be concluded.

3.4.3.4 Trend Analysis

The overall long-term tendency or impression of upward or downward movements is known as a trend. Trend analysis is very useful and commonly applied tool to forecast future event in quantitative term on the basis of tendencies in the dependent variable in the past period. Straight-line trend implies that irrespective of seasonal, cyclic and irregular fluctuation the trend value increases or decreases by absolute amount per unit of time. The linear trend values from a series in arithmetic progression. Here, using this least square method, it has been estimated the future trend values of different variables. For the estimation of linear trend line following formula has been used.

$$Y = a + b X$$

Where,

Y = dependent variable

X = Independent variable

a = intercept of the line.

b = slope of the line (shows the average changes in the value of Y as a result of one unit change in the value of X)

The value of the constant “a” and “b” can be determined by solving the following two normal equations:

$\Sigma Y = na + b\Sigma X$……………………..….(i)

$\Sigma XY = a\Sigma X + b\Sigma X$………………….(ii)

Since, $\Sigma X = 0$

$a = \frac{\sum Y}{N}$

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

3.4.3.5 Diagrammatic and Graphical Representation

Graphs and diagrams are the presentation of statistical data in the form of geometrical figures like points, lines, bars, rectangles, circles etc. They represent the data in simple and readily comprehensive form. A clear picture of the variation is the values of variable are much more easily obtained by diagrams or graphs than the values given at the table. So, an attempt has been made to present time major types of graphs and diagrams, which is tenderly used in presenting the statistical data. Hence, various bar diagrams, pie charts, and graphs have been used for presentation and analysis of data.

CHAPTER - IV

DATA PRESENTATION AND ANALYSIS

This is analytical chapter, where the researcher has analyzed and evaluated those major financial items, which mainly affect the financial performance of Agriculture Development Bank Nepal ltd. Under this heading calculated financial ratios are analyzed and evaluated after their interpretations are made. The collected secondary data have analyzed and presented in table form. For this purpose analysis and interpretations are categorized into two headings.

There are given below:

a. Analysis of financial tools/ratios
b. Accounting tools
c. Statistical tools

4.1 Analysis of Financial Tools/Ratios

The main objective of this study is to examine the financial position/performance of ADBNL. To meet this objective, it is essential to present, analyze and interpret data contained in annual reports of NTC. The annual reports include balance sheet and Income statement along with their supporting schedules. Analysis and interpretation of data is an attempt to find - out the implications and the significance of past activities/decisions in the light of present position and future prospect and to make suggestion for future action. In this study, the data are presented, analyzed and interpreted on the basis of research questions. The analysis part begins with a brief overview of financial position/ performance indicators of the firm. These ratios are used for the analysis and interpretation of financial data.

a. Liquidity Ratios
b. Activity / Assets Management Ratios
c. Leverage Ratios
d. Profitability Ratios

e. Assets Quality Ratios
f. Market Value Ratios

The technique of ratio analysis has considerable significance in studying the financial stability, liquidity, and profitability of the firm. It has been used to evaluate the financial health, operating result and growth of the sampled bank.

4.1.1 Liquidity Ratios

Liquidity ratios are used to judge the ability of the business organization to meet its maturing short-term obligations. Liquidity is measured by the speed with which a bank's assets can be converted into cash to meet deposit withdrawals and others current obligations. A bank is subjects to a minimum cash reserve requirement (CRR) imposed by central bank to ensure that a minimum amount of total assets of meet unexpected withdrawals.

The following ratios are evaluated under liquidity ratio.

a) Current Ratio

Current ratio shows the short-term solvency and the relationship between current assets and current liabilities. Current assets normally includes cash and bank balance, money at call of short notice, loan and advances, Investment on government securities and other interest, overdraft, bill purchase and discount, receivable and miscellaneous assets. Similarly current liabilities include deposit and other accounts, short terms loan, bill payable, tax provision, staff bonus, dividend payable and miscellaneous liabilities.

We have,

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

Apparently, higher the current ratio, greater short term solvency. Generally 2:1 is said to be ideal current ratio but actually what should be the ideal ratio for a concern depends upon nature of its activities.

Table 4.1

Current Ratio

(Rs. in Million)

Year	Current Assets	Current Liabilities	Ratios (in Times)
061/062	28,923.60	37,212.24	0.7773
062/063	32,929.94	36,132.98	0.9114
063/064	36,255.27	36,887.12	0.9829
064/065	40,333.38	38,351.44	1.0517
065/066	47,497.67	41,493.57	1.1447
Average	**37,187.97**	**38,015.47**	**0.9782**

Source: Annual Financial Report of ADBNL

The above table shows that the current ratio of ADBNL has poor liquidity position. Before the financial year o64/65 the current liabilities were exceeding than the current liabilities, it means the bank had facing the liquidity problem to pay the liabilities. Since, the year 064/065 the bank has improving the working capital but not in satisfactory level. The ratio maintained by commercial banks at the level of around 1:1 can be regarded as good and sufficient to meet the normal contingencies. In overall the liquidity position of the bank is poor.

b) Cash and Bank Balance to Current Asset Ratio

Cash and bank balance is composed of cash on hand including foreign cheques, other cash items and balance with domestic bank and abroad. Current assets normally includes cash and bank balance, money at call of short notice, loan and advances, investment on government securities and other interest, overdraft, bills purchase and discount, receivable and miscellaneous assets.

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

Table 4.2

Cash and Bank Balance to Current Assets Ratio

(Rs. in Million)

Year	Cash and Bank Balance	Current Assets	Ratios (in %)
061/062	3,035.04	28,923.59	10.49
062/063	4,771.70	32,929.94	14.49
063/064	3,689.32	36,255.27	10.18
064/065	3,624.00	40,333.38	08.99
065/066	5,207.65	47,497.67	10.96
Average	**4,065.54**	**37,187.97**	**10.93**

Source: Annual Financial Report of ADBNL

The above table shows that the cash and bank balance to current assets of ADBNL is in fluctuating trend. In the FY 062/063 ADBNL has maintained a high ratio. It means ADBNL has unable to utilize the cash and bank rather than other years. And in the FY 064/065 the bank has maintained the lower ratio within the study period; it means the bank has no sufficient cash and bank balance to make payment for the cheques by its customers. In the study period the overall ratio is satisfactory.

c) Loan and Advances to Current Assets Ratio

Loans and advances are the bills purchased and discounted, local and foreign currencies, loan and advances and overdrafts. Bank loans and advances are the main assets used as a source of income in the commercial banks. This ratio is calculated to determine the proportional of current assets, which are interested as loans and advances to generate the income for the bank.

$$\text{Loan and Advances to Current Assets Ratio} = \frac{\text{Loan and Advances}}{\text{Current Assets}}$$

Table 4.3

Loan and Advances to Current Assets Ratio

(Rs. in Million)

Year	Loan and Advances	Current Assets	Ratios (in Times)
061/062	22,638.26	28,923.60	78.27
062/063	24,900.91	32,929.94	75.62
063/064	27,252.33	36,255.27	75.17
064/065	30,589.43	40,333.38	75.84
065/066	32,603.10	47,497.67	68.64
Average	**27,596.81**	**37,187.97**	**74.21**

Source: Annual Financial Report of ADBNL

The above table shows that loan and advances to current assets ratio of the bank was maximum of 78.27% in year 061/062 and minimum of 68.64% in year 065/066 with an average of 74.21% during the study period. The analysis indicates that the loans and advances to current assets ratio are fluctuating. In year 065/066 the ratio is high this is due to high loan and advances given to customer and the financial institution.

d) Cash and Bank Balance to Current and Saving Deposit Ratio

It measures the ability of the bank to meet its immediate obligations. The bank should maintain adequate cash and bank balance to meet the unexpected and heavy withdrawal of deposits.

Cash and Bank Balance to Current and Saving Deposit Ratio

$$= \frac{\text{Cash and Bank Balance}}{\text{Current and Saving Deposit}}$$

Table 4.4

Cash and Bank Balance to Current and Saving Deposit Ratio

(Rs. in Million)

Year	Cash and Bank Balance	Current and Saving Deposit	Ratios (in %)
061/062	3,035.04	16,425.37	18.48
062/063	4,771.70	17,504.96	27.26
063/064	3,689.32	19,574.27	18.85
064/065	3,624.00	20,779.87	17.44
065/066	5,207.65	23,403.26	22.25
Average	**4,065.54**	**19,537.54**	**20.81**

Source: Annual Financial Report of ADBNL

Cash and Bank Balance to Current and Saving Deposit Ratio remained 18.48%, 27.26%, 18.85%, 17.44%, 22.25% and 20.81% respectively over the five years of study period.

Above calculated ratio shows Cash and Bank Balance to Current and Saving Deposit Ratios are highly fluctuated over the five years period. In the FY year 062/063 was very high ratio and 064/065 was low ratio. From above it can be observed that ADBNL may not be able to meet its immediate obligation as the bank balance.

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

Cash and bank are the most liquid assets of the bank. The ratio measures the banks' ability to meet its unanticipated calls and all types of deposits. As higher ratio indicates the higher ability to meet their deposits and vice versa.

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

Table 4.5

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

(Rs. in Million)

Year	Cash and Bank Balance	Total Deposit Ratio	Ratios (in %)
061/062	3,035.04	27,223.05	11.15
062/063	4,771.70	27,223.05	16.10
063/064	3,689.32	32,416.36	11.38
064/065	3,624.00	32,553.83	11.13
065/066	5,207.65	35,159.61	14.81
Average	**4,065.54**	**31,396.93**	**12.95**

Source: Annual Financial Report of ADBNL

The above table shows that cash reserve ratio of the bank varies from maximum of 16.10% in year 062/063 to minimum of 11.13% in year 064/065 with an average of 12.95% during the study period of five years. Ratios are fluctuating may be the central bank has indicate the higher cash reserve ratio to all the banks or may be the higher cash and bank balance of the ADBNL. Higher the ratio better is the liquidity position but un utilization of the fund, which sacrifice the opportunity of return on loan and advances.

f) Saving Deposit to Total Deposit

Saving deposit stand midway between current and fixed deposit. These deposits are not as freely withdrawal as current deposit.

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

Table 4.6

Saving Deposit to Total Deposit Ratio

(Rs. in Million)

Year	Saving Deposit	Total Deposit	Ratios (in %)
061/062	15,189.45	27,223.05	55.80
062/063	16,225.46	27,223.05	54.76
063/064	17,311.41	32,416.36	53.40
064/065	18,382.47	32,553.83	56.47
065/066	21,156.51	35,159.61	60.17
Average	**17,653.06**	**31,396.93**	**56.23**

Source: Annual Financial Report of ADBNL

The above table shows that saving deposit to total deposit ratio of the bank varies from maximum of 60.17% in FY 065/066 to the minimum of 53.40 in the FY 063/064 with an average of 56.23% during the study period of five years. In year 065/066 ratio is higher due to the high saving deposited by customer and financial institutions or may be the lower investment related to total deposit.

4.1.2 Activity/Assets Management Ratios

The assets management ratio is used to measure the efficiency of assets utilization of a bank. A commercial bank should be able to manage its assets to gain a sustainable profit so that it can be survive in the competitive environment. It is used to measure the bank's efficiency towards its fund mobilization. Following ratios are used to measure the assets management efficiency of ADBNL.

a) Loan and Advances to Total Deposit Ratio

This ratio measures the efficiency of the bank in mobilization its deposits on loan and advances to generate the profit of the bank. A high ratio is preferable for the better performance.

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

Table 4.7

Loan and Advances to Total Deposit Ratio

(Rs. in Million)

Year	Loan and Advances	Total Deposit	Ratios (in %)
061/062	22,638.26	27,223.05	83.16
062/063	24,900.91	27,223.05	84.03
063/064	27,252.33	32,416.36	84.07
064/065	30,589.43	32,553.83	93.97
065/066	32,603.10	35,159.61	92.73
Average	**27,596.81**	**31,396.93**	**87.90**

Source: Annual Financial Report of ADBNL

The above shows the proportion of total deposits invested in loan and advances. In the FY 061/062, 83.16% of total deposit was invested in loan and advances. In the year 064/065 the ratio was high, it means the bank is successfully utilizing its deposits on loan and advances.

b) Loan and Advances to Fixed Deposit Ratio

Fixed deposits are the highest interest bearing obligation for any commercial bank, whereas loan and advance in a major sources of earning interest. The ratio measures how many times the fixed deposit is mobilized in loan and advances for income generating purpose.

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

Table 4.8

Loan and Advances to Fixed Deposit Ratio

(Rs. in Million)

Year	Loan and Advances	Fixed Deposit	Ratios (in %)
061/062	22,638.26	10,088.57	224.40
062/063	24,900.91	11,426.19	217.93
063/064	27,252.33	12,105.20	225.13
064/065	30,589.43	10,981.04	278.57
065/066	32,603.10	10,672.59	305.48
Average	**27,596.81**	**11,054.72**	**249.64**

Source: Annual Financial Report of ADBNL

The ratio of ADBNL remained 224.40%, 217.93%, 225.13%, 278.57% and 305.48% in the respective years of reviewed period. And the average ratio is 249.64%. The ratio revealed an increasing trend. ADBNL has shown good performance to efficiently utilize the highest interest bearing deposit in loan and advanced.

c) Loan and Advances to Saving Deposit Ratio

The ratio of loan and advance to saving deposit ratio measures the efficiency of ADBNL on its saving deposit. Saving deposit is the second highest interest bearing deposit. The ratio measures how many times or percent the amount is mobilized in loan and advance in comparison to saving deposit.

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

Table 4.9

Loan and Advances to Saving Deposit Ratio

(Rs. in Million)

Year	Loan and Advances	Saving Deposit	Ratios (in %)
061/062	22,638.26	15,189.45	149.04
062/063	24,900.91	16,225.46	153.47
063/064	27,252.33	17,311.41	157.42
064/065	30,589.43	18,382.47	166.41
065/066	32,603.10	21,156.51	154.10
Average	**27,596.81**	**17,653.06**	**156.33**

Source: Annual Financial Report of ADBN

As shown in the above table the ratio was in increasing trend but in the year 065/066 the ratio was decreased. In the study period the highest ratio was in the year 064/064 by 166.41% and in the year 065/066, it was decreased to 154.10%. The average ratio of ADBNL is 156.33%. It indicates in sufficient utilization of saving deposit in form of loans and advances.

d) Total Investment to Total Deposit Ratio

A commercial bank may mobilize its deposit by investing its fund in different securities issued government and other financial and non-financial companies. Now the efforts have been made to measure the efficiency of the bank in mobilizing its deposits to its investment activities. A high total investment to total deposit ratio indicates the high efficiency of the bank in mobilizing its deposits in investment activities and vice versa.

The bank should maintain the balance between the return from the investment and the risk of liquidation from this investment.

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

Table 4.10

Investment to Total Deposit Ratio

(Rs. in Million)

Year	Investment	Total Deposit	Ratios (in %)
061/062	1,467.51	27,223.05	5.39
062/063	1,623.00	27,223.05	5.48
063/064	3,286.29	32,416.36	10.14
064/065	2,881.66	32,553.83	8.85
065/066	4,896.06	35,159.61	13.93
Average	**2,830.90**	**31,396.93**	**9.02**

Source: Annual Financial Report of ADBNL

Here, investment consists of investment in HMG treasury bills, development bonds, company shares etc. The ratio showed irregular pattern during the study period. In the year 061/062, 5.39% of total deposit was invested in treasury bills, bonds and other companies' shares. But in FY 065/066 it was increased to 13.93%. The average ratio of investment of total deposit is 9.02% within the study period.

e) Performing Assets to Total Assets Ratio

This ratio measures what portion of assets has been funded for income generation.

Performing assets includes loans and advances; bills purchased and discounted investment and money at call or short notice.

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

Table 4.11

Performing Assets to Total Assets Ratio

(Rs. in Million)

Year	Performing Assets	Total Assets	Ratios (in %)
061/062	23,994.09	31,222.98	76.85
062/063	26,412.24	35,297.62	74.83
063/064	30,591.39	38,160.21	80.17
064/065	33,521.08	44,085.96	76.04
065/066	39,743.36	51,818.74	76.70
Average	**30,852.43**	**40,117.10**	**76.91**

Source: Annual Financial Report of ADBNL

Performing assets to total assets remained 76.85%, 74.83%, 80.17%, 76.04% and 76.70% respectively over the five year and the average ratio is 76.91% within the study period. ADBNL has maintained high ratio throughout the period of study. Most of the bank's total asset has been funded for income generation. A higher ratio indicates greater utilization of assets that leads to sound profitability position of the bank.

f) Performing Assets to Total Debt Ratio

This ratio shows the pattern of use of the fund collected from the outsider. High ratio shows the success of the bank in utilization of creditors fund in productive areas. Low ratio shows idleness of the cost bearing resources.

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

Table 4.12

Performing Assets to Total Debt Ratio

(Rs. in Million)

Year	Performing Assets	Total Debt	Ratios (in %)
061/062	23,994.09	37,212.24	64.48
062/063	26,412.24	36,132.98	73.10
063/064	30,591.39	36,887.12	82.93
064/065	33,521.08	38,351.44	87.41
065/066	39,743.36	41,493.57	95.78
Average	**30,852.43**	**38,015.47**	**81.16**

Source: Annual Financial Report of ADBNL

Performing Asset to Total Debt Ratio fluctuated over the five years of study period. In a year 061/062 and in a year 065/066 were ratio 64.48% and 95.78% respectively which are the highest and lowest over the study period. The ratios are in increasing trend, it shows that ADBNL has improving its utilization of debts. High ratio represents the success in utilizing the fund.

g) Non Performing Loan Ratio

It is noted that the stability of the banking system cannot be ensured unless and until the banks and financial institutions run in the prudent and sound manner. Banks cannot maintain their financial health if there are a lot of defaulters on its portfolio of loans and advances. A lot of defaulters in the loan portfolio indicate poor and weak health of the institution.

$$\text{Non-Performing Loan Ratio} = \frac{\text{Non- Performing Loans and Advances}}{\text{Total Loans and Advances}}$$

Table 4.13

Non-Performing Loan Ratio

(Rs. in Million)

Year	Non-Performing Loan	Total Loans and Advances	Ratios (in %)
061/062	6,003.99	25,305.08	23.73
062/063	6,858.99	26,451.75	25.93
063/064	6,185.29	28,255.07	21.89
064/065	4,280.51	32,324.21	13.24
065/066	3,720.77	34,580.33	10.76
Average	**5,409.91**	**29,383.29**	**18.41**

Source: Annual Financial Report of ADBNL

The above table shows that non-performing loan ratio of the bank varies from maximum of 25.93% in Year 062/063 to minimum 10.76% in year 065/066 with an average of 18.41% during the study period of five years. The analysis indicates that the portion of non performance loan and advances to total loan and advances has been gradually decreasing. It seems ADBNL has utilizing its loan and advances to performance loan and advances rather than no performance loan and advances.

4.1.3 Leverage Ratios

Leverage ratios helps to test long term solvency position of the firm. It helps to know the relationship of long term debt with share holders fund or total capital. The leverage ratios of the bank are as follow.

a) Debt to Assets (D/A) Ratio

This ratio exhibits the relationships between creditors funds and owners capital. This ratio shows the proportion of outsiders fund used in financing total assets. Total debt include loans and advances taken from other financial institution and deposit carrying interest i.e. saving deposit, fixed deposit account and call deposit. Total assets consists of cash in hand, bank balance, money at call and short notice, investments, loans, advances, bill purchased, fixed assets and other assets.

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

Table 4.14

Debt to Assets (D/A) Ratio

(Rs. in Million)

Year	Total Debt	Total Assets	Ratios (in Times)
061/062	37,212.24	31,222.98	1.19
062/063	36,132.98	35,297.62	1.02
063/064	36,887.12	38,160.21	0.97
064/065	38,351.44	44,085.96	0.87
065/066	41,493.57	51,818.74	0.80
Average	**38,015.47**	**40,117.10**	**0.95**

Source: Annual Financial Report of ADBNL

The above table depicts the ratio remained 1.19, 1.02, 0.97, 0.87 and 0.80 times respectively in the review period and the average is 0.95 times. These ratios are in decreasing trend that shows the total debts are decreasing in aspect of total assets. Above table shows that the larger portion of the bank’s asset has been financed through outsider fund and the bank has high risk of creditors.

b) Debt to Equity Ratio

It is a test of long term solvency of a firm. The ratio indicates the relationship between debt and equity. Total Debt includes long term and short term interest bearing obligation which are loans and advances taken from other financial institution and deposits carrying interest i.e. saving deposit, fixed deposit and call deposit. Equity is combination of paid of capital and reserve and surplus. Debt Equity Ratio shows the mix of debt and equity in capital structure.

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

Table 4.15

Debt to Equity Ratio

(Rs. in Million)

Year	Total Debt	Shareholders' Equity	Ratios (in Times)
061/062	37,212.24	-5,989.27	-6.21
062/063	36,132.98	-835.36	-43.25
063/064	36,887.12	1,273.09	28.97
064/065	38,351.44	5,734.52	6.69
065/066	41,493.57	10,325.17	4.02
Average	**38,015.47**	**2,101.63**	**-1.96**

Source: Annual Financial Report of ADBNL

Total Debt to Equity Ratio of ADBNL remained -6.21, -43.25, 28.97, 6.69 and 4.02 times over the study period. This ratios show ADBNL has high portion of debt in capital structure. In the years 061/062 and 062/063 the debt to equity ratio is negative. It shows the bank has exceeded total debt than total shareholders' equity and it has high risk of bankruptcy.

c) Interest Coverage Ratio

It is a test of the firm's debt servicing capacity. The ratio of earnings before interest and taxes (EBIT) to interest charges. It measures the ability of the firm to meet its annual interest payments. The interest coverage ratio is computed by dividing earnings before interest and taxes (EBIT) by interest charges.

$$\text{Interest Coverage Ratio} = \frac{\text{EBIT}}{\text{Interest Charge}}$$

Table 4.16

Interest Coverage Ratio

(Rs. in Million)

Year	EBIT	Interest Charges	Ratios (in Times)
061/062	-78.63	1,487.50	-0.05
062/063	1,005.31	1,439.84	0.70
063/064	1,386.11	1,605.87	0.86
064/065	869.70	1,043.81	0.83
065/066	1,847.44	1,157.07	1.60
Average	**1,005.99**	**1,346.82**	**0.75**

Source: Annual Financial Report of ADBNL

The ratios are fluctuating throughout the years. Interest coverage ratio remained -0.05, 0.70, 0.86, 0.83 and 1.60 times respectively over the five year study period. In the FY 061/062 the ratio was negative but the in the respective year the ratio were in increasing trend. A high ratio is sign of low burden of borrowing of the bank and lower utilization of borrowing capacity. Lower ratio indicates more use of debt for which interest is to be paid or insufficient operation.

4.1.4 Profitability Ratios

There are many measure of profitability. Each relates the returns of the firm to its sales, assets, and equity or share value. As a group, these measures allow the analyst to evaluate firm's earning with respect to given level of sales, a certain level of assets, the owners investments or share value. Profit is the ultimate output of a commercial bank and it will have no future if it fails to make sufficient profits. Therefore, the financial manager continuously evaluates the efficiency of the bank in terms of profits. Following profitability ratio are used to measure the performance of ADBNL.

a) Return on Total Assets

This ratio shows the relationship of net profit and total assets and is to determine how efficiently the total assets have been used by the management. This ratio indicates the ability of generating profit per rupees of total assets.

$$\text{Return on Total Assets} = \frac{\text{Net Profit After Tax}}{\text{Total Assets}}$$

Table 4.17

Return on Total Assets

(Rs. in Million)

Year	Net Profit After Tax	Total Assets	Ratios (in %)
061/062	-78.63	31,222.98	-0.25
062/063	353.52	35,297.62	1.01
063/064	1,058.45	38,160.21	2.77
064/065	669.24	44,085.96	1.52
065/066	1,057.60	51,818.74	2.04
Average	**612.04**	**40,117.10**	**1.53**

Source: Annual Financial Report of ADBNL

Return on Total Asset ratio remained negative in a year 061/062 but after 061/062 bank is able to earned profit so its ratio were in positive form. Its ratio fluctuated over five years of study period. In a year 062/063, 1.01% was lowest ratio and in year 063/064 was the highest ratio over study period. Higher the ratio indicates the success of management in overall operation.

b) Return on Shareholder’s Equity

Net worth or shareholders equity refers to the owner's claim on the assets of the bank. The ROE measures the earned on the owner's investment. This ratio indicates how well the banks have used the resources of the owners.

$$\text{Return on Shareholder's Equity} = \frac{\text{Net Profit After Tax}}{\text{Total Shareholder's Equity}}$$

Table 4.18

Return on Shareholder's Equity

(Rs. in Million)

Year	Net Profit after Tax	Shareholders' Equity	Ratios (in %)
061/062	-78.63	-5,989.27	1.31
062/063	353.52	-835.36	-42.32
063/064	1,058.45	1,273.09	83.14
064/065	669.24	5,734.52	11.67
065/066	1,057.60	10,325.17	10.24
Average	**612.04**	**2,101.63**	**29.12**

Source: Annual Financial Report of ADBNL

The above table shows that return on equity of the bank varies from maximum of 83.14% in year 063/064 to the minimum of -42.32%in year 062/063.In the FY 061/062 and 062/063 the shareholders' equity is negative due to loss. The analysis indicates that ROE of ADBNL is not better position, which implies not better utilization of shareholder's equity.

c) Interest Earned to Total Assets Ratio

Interest earning is the major source of income of a commercial bank. This ratio is calculated to find out percentage of the interest earned in comparison to total assets.

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

Table 4.19

Interest Earned to Total Assets

(Rs. in Million)

Year	Interest Earned	Total Assets	Ratios (in %)
061/062	3,915.22	31,222.98	12.54
062/063	4,033.54	35,297.62	11.43
063/064	4,623.10	38,160.21	12.11
064/065	3,363.73	44,085.96	7.63
065/066	4,231.14	51,818.74	8.17
Average	**4,033.35**	**40,117.10**	**10.05**

Source: Annual Financial Report of ADBNL

The above table shows the interest earned to total assets of the bank varies from maximum of 12.54 % in year 061/062 to the minimum of 7.63% in year 064/065 with an average of 10.05% during the study period of 5 years. The analysis indicates that the ratio is in fluctuating trend.

d) Return on Loan and Advances Ratio

Return on loan and advances ratio shows how efficiency of the banks has utilized their resource to earn good return from provided loan and advances.

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

Table 4.20

Return on Loan and Advances Ratio

(Rs. in Million)

Year	Net Profit after Tax	Loan and Advances	Ratios (in %)
061/062	-78.63	25,305.08	-0.25
062/063	353.52	26,451.75	1.06
063/064	1,058.45	28,255.07	3.07
064/065	669.24	32,324.21	1.83
065/066	1,057.60	34,580.33	2.76
Average	**612.04**	**29,383.29**	**1.76**

Source: Annual Financial Report of ADBNL

The above table shows that the ratio of return on loan and advances of ADBNL in fluctuating trend. In FY 061/062 the ratio was negative due to the net loss. In the FY 063/064 the ratio is maximum that is 3.07% within the five year study period. It shows that the ADBNL has not proper utilizing of its loan and advances. Concluding by the above table we can tell that the bank has poor financial performance.

e) Return on Total Deposit Ratio

This ratio described the percentage of profit earned by using total deposit. This ratio shows the efficiency towards its deposit mobilization. Higher ratio indicates proper utilization of total deposit and lower ratio indicates the improper utilization of total deposit.

$$\text{Return on Total Deposit} = \frac{\text{Net Profit after Tax}}{\text{Total Deposit}}$$

Table 4.21

Return on Total Deposit

(Rs. in Million)

Year	Net Profit after Tax	Total Deposit	Ratios (in %)
061/062	-78.63	27,223.05	-0.29
062/063	353.52	27,223.05	1.19
063/064	1,058.45	32,416.36	3.27
064/065	669.24	32,553.83	2.06
065/066	1,057.60	35,159.61	3.01
Average	**612.04**	**31,396.93**	**1.95**

Source: Annual Financial Report of ADBNL

Above table shows that return on total deposit ratio are fluctuated over the five year study period. It measures the contribution of net profit after tax to total deposit. In the FY 061/062 the ratio as negative by -0.29% and in the year 063/064 the maximum ratio was 3.27% over the study period.

f) Total Interest Expenses to Total Interest Income Ratio

Bank main source of income is interest income. This ratio shows the proportion of interest expenses to interest income. Lower ratio is favorable from profitability point of view.

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

Table 4.22

Total Interest Expenses to Total Interest Income Ratio

(Rs. in Million)

Year	Total Interest Expenses	Total Interest Income	Ratios (in %)
061/062	1,487.50	3,915.22	37.99
062/063	1,439.84	4,033.54	35.70
063/064	1,605.87	4,623.10	34.74
064/065	1,043.81	3,363.73	31.03
065/066	1,157.07	4,231.14	27.35
Average	**1,346.82**	**4,033.35**	**33.39**

Source: Annual Financial Report of ADBNL

The above table shows that the ratios are in decreasing trend. The ratio remained 37.99%, 35.70%, 34.74%, 31.03% and 27.35% respectively over the five year study period and the average ratio is 33.39%. It shows the ADBNL is more successful in later years in allocating interest-bearing debt in profitable sector.

g) Net Interest Margin

Net interest margin measured the net return on the bank's interest earning assets takes as investment. Loan and securities investment are the major components of earning assets of the commercial bank.

$$\text{Net Interest Margin} = \frac{\text{Net Interest Income}}{\text{Interest Earning Assets}}$$

Table 4.23

Net Interest Margin

(Rs. in Million)

Year	Net Interest Income	Interest Earning Assets	Ratios (in %)
061/062	2,427.73	32,634.59	7.44
062/063	2,593.70	34,889.94	7.43
063/064	3,017.23	37,684.55	8.01
064/065	2,319.92	39,339.26	5.90
065/066	3,074.07	43,106.45	7.13
Average	**2,686.53**	**37,530.96**	**7.16**

Source: Annual Financial Report of ADBNL

The above table shows that the net interest margin ratio of ADBNL was 7.44%, 7.43%, 8.01%, 5.90% and 7.13% and its average ratio was 7.16% in respective years of study period. It has highest ratio in FY 061/062 and lowest ratio in FY 064/065. High ratio indicates the proper utilization of bank users for income generating purpose. It shows the ratios are in fluctuating trend and the bank has not maintaining sufficient utilization of resources.

h) Net Non-Interest Margin Ratio

Net non-interest margin is the ratio of net non-interest income to bank's interest earning assets. The net non-interest income is non-interest revenues minus non-interest expenses. Non-interest revenues are the fees generated from providing various services and non-interest expenses are the costs including wages, salaries, repair and maintenance, provision for loan losses, etc.

$$\text{Net Non-Interest Margin Ratio} = \frac{\text{Net Non - Interest Income}}{\text{Interest Earning Assets}}$$

Table 4.24

Net Non-Interest Margin Ratio

(Rs. in Million)

Year	Net Non-Interest Income	Interest Earning Assets	Ratios (in %)
061/062	-2,599.14	32,634.59	-7.96
062/063	-1,969.55	34,889.94	-5.65
063/064	-1,654.34	37,684.55	-4.39
064/065	-4,380.86	39,339.26	-11.14
065/066	-4,477.71	43,106.45	-10.39
Average	**-3,016.32**	**37,530.96**	**-8.04**

Source: Annual Financial Report of ADBNL

The above table shows that the ratios of net non-interest income to interest earning assets are in decreasing trend. The ratio remained -7.96%, -5.65%, -4.39%, -11.14% and -10.39% in respective year of the study period. Its average ratio is -8.04%. ADBNL is more successful in later years in generating non interest income.

i) Net Profit Margin Ratio

The profit margin of bank reflects effectiveness in control in expenses as well as service pricing policies. It measures a bank's ability to control expenses and thus its ability to produce net income from its operation revenue (income). The ratio reveals how much of net income a bank is generating on each rupee of operating revenue.

$$\text{Net Profit Margin Ratio} = \frac{\text{Net Income}}{\text{Operating Income}}$$

Table 4.25

Net Profit Margin Ratio

(Rs. in Million)

Year	Net Profit	Operating Income	Ratios (in %)
061/062	-78.63	4,244.18	-1.85
062/063	353.52	4,243.50	8.33
063/064	1,058.45	4,904.95	21.58
064/065	669.24	3,797.50	17.62
065/066	1,057.60	4,725.53	22.38
Average	**612.04**	**4,383.13**	**13.96**

Source: Annual Financial Report of ADBNL

Net profit margin remained negative in a year 061/062 but after this year bank is able to earned profit so its ratio were positive form. Its ratio fluctuated over five year of study period. In a year 062/063, 8.33% was the lowest ratio and in 63/64 was the highest ratio over the study period. Higher ratio indicates the success of management in overall operation.

j) Net Operating Margin Ratio

When financial charges are significant then it is appropriate for the comparative study, to compute the net operating margin ratio rather than the return on assets ratio. This ratio is useful to measure the profitability ratio before interest and taxes to all financial resources invested in the bank assets.

$$\text{Net Operating Margin} = \frac{\text{Net Operating Revenue}}{\text{Total Assets}}$$

Where,

Net Operating Revenue = Total Operating Revenue – Total Operating Expenses

Table 4.26

Net Operating Margin

(Rs. in Million)

Year	Net Operating Revenue	Total Assets	Ratios (in %)
061/062	-171.41	31,222.98	-0.55
062/063	624.15	35,297.62	1.77
063/064	1,362.88	38,160.21	3.57
064/065	-2,060.94	44,085.96	-4.67
065/066	-1,403.64	51,818.74	-2.71
Average	**-329.79**	**40,117.10**	**-0.82**

Source: Annual Financial Report of ADBNL

The above table shows that net operating margin of the bank caries from maximum of 3.57% in year 063/064 to the minimum of -4.67% in year 064/065 with an average of -0.82% during the five year study period. The ratios are highly fluctuated. This analysis shows that three of five year study the ratios are negative, it shows the ADBNL has low operating performance.

k) Assets Utilization Ratio

This ratio measures the efficiency with which a bank uses its assets to generate profits. It measures the productivity of the assets. This ratio is also known as assets turnover ratio. It shows the relationship of operating revenue and total assets and determines how efficiently the total assets have been used by the management. This ratio evaluates the operating revenue on investment earned by the firm.

$$\text{Assets Utilization Ratio} = \frac{\text{Total Operating Revenue}}{\text{Total Assets}}$$

Table 4.27

Assets Utilization Ratio

(Rs. in Million)

Year	Total Operating Revenue	Total Assets	Ratios (in %)
061/062	4,244.18	31,222.98	13.59
062/063	4,243.50	35,297.62	12.02
063/064	4,904.95	38,160.21	12.85
064/065	3,797.50	44,085.96	8.61
065/066	4,725.53	51,818.74	9.12
Average	**4,383.13**	**40,117.10**	**10.93**

Source: Annual Financial Report of ADBNL

The above table shows that the assets utilization ratio of ADBNL was 13.59%, 12.2%, 12.85%, 8.61% and 9.12% and its average ratio was 10.93%, in respective year of study period. It has highest ratio in year 061/062 and lowest ratio in year 064/065. High ratio indicates the proper utilization of bank's assets for income generation.

l) Operating Efficiency Ratio

Operating efficiency ratio measures how efficiently the management is able to mobilize the resources in a firm. It shows the relationship between operating revenue and operating expenses.

$$\text{Operating Efficiency Ratio} = \frac{\text{Total Operating Expenses}}{\text{Total Operating Revenue}}$$

Table 4.28

Operating Efficiency Ratio

(Rs. in Million)

Year	Total Operating Expenses	Total Operating revenue	Ratios (in %)
061/062	4,415.60	4,244.18	104.4
062/063	3,619.35	4,243.50	85.29
063/064	3,542.06	4,904.95	72.21
064/065	5,858.44	3,797.50	154.27
065/066	6,129.17	4,725.53	129.70
Average	**4,712.92**	**4,383.13**	**107.52**

Source: Annual Financial Report of ADBNL

The above table shows that the operating efficiency ratios are highly fluctuating. It has maximum ratio of 154% in year 064/065 to minimum of 72.21% in Year 063/064. In years 061/062, 064/065 and 065/066 the ratios indicates that the total expenses is overleaping the total income. It denotes the bank is not operating sufficiently its assets.

m) Staff Expenses to Total Income

This ratio measure the proportion of income spent for the staff whose contribution is of great significance in the success of the bank. Staff expenses include the salary and allowances, contribution to the provident fund and gratuity fund, staff training expenses and other allowances and expenses made to staff.

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

Table 4.29

Staff Expenses to Total Income Ratio

(Rs. in Million)

Year	Staff Expenses	Total Income	Ratios (in %)
061/062	963.18	4,336.97	22.21
062/063	1,775.34	4,361.27	40.71
063/064	1,306.80	4,912.37	26.60
064/065	1,849.13	3,815.84	48.46
065/066	2,486.72	5,360.52	46.39
Average	**1,676.23**	**4,557.39**	**36.78**

Source: Annual Financial Report of ADBNL

Ratio of ADBNL remained 22.21%, 40.71%, 26.60%, 48.46% and 46.39% in respective years of study period and its average ratio is 36.78%. ADBNL has highest ratio 48.46% in year 064/065 and lowest ratio 22.21%in year 061/062. Low ratio is good for the bank point of view but staff always expected different kind of facilities. So lower ratio may have negative effect in staff's morale which in turn profit will decrease and high ratio directly affects the profitability of bank.

4.1.5 Assets Quality Ratios

Assets quality ratio measure the turnover of economic resource in terms of quality. Asset quality ratios are intended to measure the quality of assets contained by the bank. Following ratio are used to measure the assets management efficiency of ADBNL.

a) 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 must if its loans and advances in secured sector.

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

Table 4.30

Loan Loss Provision to Total Income

(Rs. in Million)

Year	Loan Loss Provision	Total Income	Ratios (in %)
061/062	1,505.11	4,336.97	34.70
062/063	149.28	4,361.27	3.42
063/064	337.78	4,912.37	6.88
064/065	2,677.48	3,815.84	70.17
065/066	2,184.67	5,360.52	40.76
Average	**1,370.87**	**4,557.39**	**30.08**

Source: Annual Financial Report of ADBNL

Loan Loss Provision to total Income ratio remained 34.70%, 3.42%, 6.88%, 70.17% and 40.76% over five year of study period. Ratio was highly fluctuating trend over the period. The highest6745 ratio over the study period is 70.17% in year 064/065 and the lowest is 3.42% in year 062/063. Higher the ratio indicates the bank advanced loan in risky assets. The study shows that ADBNL is unsuccessful to reduce loan loss provision.

b) Loan loss Provision to total Deposit Ratio

This ratio shows the proportion of banks income held as loan loss provision in relation to the total deposit collected. Higher ratio means quality of assets contained by the banks in form of loan is not much satisfactory. Low ratio is the index of utilization of resources in healthy sector.

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

Table 4.31

Loan Loss Provision to Total Deposit Ratio

(Rs. in Million)

Year	Loan Loss Provision	Total Deposit	Ratios (in %)
061/062	1,505.11	27,223.05	5.53
062/063	149.28	27,223.05	0.50
063/064	337.78	32,416.36	1.04
064/065	2,677.48	32,553.83	8.22
065/066	2,184.67	35,159.61	6.21
Average	**1,370.87**	**31,396.93**	**4.37**

Source: Annual Financial Report of ADBNL

Loan Loss Provision to Total Deposit ratio remained 5.53%, 0.50%, 1.04%, 8.22% and 6.21over the five years of study period. It fluctuated over the study period. In a year 062/063 bank was able to reduce the loan loss provision to total deposit ratio to 0.51 but except 062/063 all ratios are more than 1%. So, ADBNL lent greater portion of loans in unsecured sectors. High Loan Loss Provision shows the default in payment of the loan by the borrowers.

c) Loan loss Coverage Ratio

Risk assets consists loans and advances, bill purchased and discounted. NRB has directed commercial banks to maintain provision for loan loss on the basis of category of loans and risk grade. Therefore the ratio 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.

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

Table 4.32

Loan Loss Coverage Ratio

(Rs. in Million)

Year	Loan Loss Provision	Total Risk Assets	Ratios (in %)
061/062	1,505.11	31,309.07	4.81
062/063	149.28	33,310.75	0.45
063/064	337.78	34,440.37	0.98
064/065	2,677.48	36,604.72	7.31
065/066	2,184.67	38,301.10	5.70
Average	**1,370.87**	**34,793.20**	**3.94**

Source: Annual Financial Report of ADBNL

Loan Loss Coverage Ratio remained 4.81% 0.45%, 0.98%, 7.31%, and 5.70% over the five years of study period. It fluctuated over the study period. Only the two years ratios were below the 1% and rest were over 1%. It means major portion of loan were risky. These ratios shows ADBNL has not been successful to fore see the quality of loans lent and its Loan Loss Coverage cannot be ranked as satisfactory.

d) Accrued Interest to total Interest Income Ratio

Accrued interest refers to the interest that is accrued but not cancelled. High ratio indicates the larger portion interest remained be collected. Lower ratio reflects the better quality of assets in the bank.

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

Table 4.33

Accrued Interest to total Interest Income Ratio

(Rs. in Million)

Year	Accrued Interest	Total Interest Income	Ratios (in %)
061/062	6,332.58	3,915.22	161.74
062/063	6,907.18	4,033.54	171.24
063/064	5,762.38	4,623.10	124.64
064/065	4,338.78	3,363.73	128.99
065/066	4,338.78	4,231.14	102.51
Average	**5,535.94**	**4,033.35**	**137.25**

Source: Annual Financial Report of ADBNL

Accrued Interest to Total Interest Income Ratio remained 161.74% 171.24%, 124.64%, 128.99%, and 102.51% over the five years of study period. It fluctuated over the study period. The above table shows that accrued interest more than the total interest income. It means major portion of loan were lent to risky sectors. These ratios shows ADBNL has not been successful to fore see the quality of loans lent.

4.1.6 Market Value Ratios

Unlike creditors, the true owners of business forms are the common stockholders, who invest their money in the firm because of their expectation of future returns. The common stockholders referred as a residual owner, since in essence he/she receives what is left after all other claims on the firm's income and assets have been satisfied. As a result of this generally uncertain position, the common stockholder accepts to be compensated with adequate dividends and ultimately, capital gains. From the point of view of the shareholders, the following financial ratios indicate the financial performance of the firm in a given period of time.

a) Earnings Per Share (EPS)

The firm's Earning per Share are generally of interest to present or prospective stockholders and management. The EPS represents the amount earned on behalf of each outstanding share of common stock. They are closely watched by investing public and are considered an important indicator of the firm's success.

$$\text{Earnings per Share} = \frac{\text{Earning Avaliable to Commom Shareholders}}{\text{No. of Equity Share Outstanding}}$$

Table 4.34

Earnings per Share

(Rs. in Million)

Year	Earnings Available to Shareholders	No. of Share	Ratios (in Rs.)
061/062	-78.63	16.78	-4.69
062/063	353.52	64.78	5.46
063/064	1,058.45	75.28	14.06
064/065	669.24	107.77	6.21
065/066	1,057.60	107.77	9.81
Average	**612.04**	**74.48**	**8.22**

Source: Annual Financial Report of ADBNL

Ratios remained Rs.-4.69, Rs.5.46, Rs.14.06, Rs.6.21 and Rs.9.81 respectively over five years of study period. Ratio fluctuated, highest ratio was in a year 063/064 and in year 061/062 it was negative because of loss. EPS reflects poor profitability position of the bank.

b) Dividend Per Share (DPS)

Dividend per share is the earning distributed to ordinary shareholders dividend by the number of ordinary shares outstanding. Net profit after tax and bonus belong to shareholders but the amount they really receive is the amount of earning distributed as cash dividends. So the large investor in the bank may be interested in the DPS.

$$\text{Dividend per Share} = \frac{\text{Earning Paid to Shareholders}}{\text{No. of Equity Share Outstanding}}$$

Note: Dividend is unpaid till the date of study.

c) Price Earnings Ratio (P/E Ratio)

This is the ratio of the market price per share to earnings per share. It shows the rupee amount investors will pay for Rs.1 of current earnings. Company having high and growth prospects have high P/E ratio as compared to no growth or slow growth firms. It can be calculated as follows;

$$\text{Price Earnings Ratio} = \frac{\text{Price Per Share}}{\text{Earning Per Share}}$$

Note: ADBNL had not listed in NEPSE before the study period.

d) Dividend Payout Ratio (DPR)

A ratio between dividends per share (DPS) to earning per share to earnings per share (EPS) is known as dividend payout ratio. It can be computed by the following formula;

$$\text{Dividend Payout Ratio} = \frac{\text{Dividend Per Share}}{\text{Earning Per Share}}$$

Note: Dividend is unpaid till the study period.

e) Book Value Per Share (BVPS)

Book value per share is the value of a share of common stock that is determined by the balance sheet. It is calculated by dividing shareholders equity by the number of share outstanding. Where, shareholder's equity is the sum of all accounts of the owner's i.e. common stock plus share premium plus retained earnings.

$$\text{Book Value per Share} = \frac{\text{Shareholders Equity}}{\text{No. of Equity Share Outstanding}}$$

Table 4.35

Book Value per Share

(Rs. in Million)

Year	Shareholders' Equity	No. of Equity Share	Ratios (in %)
061/062	-5,989.27	16.78	-357.01
062/063	-835.36	64.78	-12.09
063/064	1,273.09	75.28	16.91
064/065	5,734.52	107.77	53.21
065/066	10,325.17	107.77	95.80
Average	**2,101.63**	**74.48**	**28.22**

Source: Annual Financial Report of ADBNL

Ratios remained Rs.-357.01, Rs. -12.09, Rs.16.91, Rs.53.21 and Rs.95.80 respectively over five years of study period. The highest ratio was in a year 65/066 and in year 061/062 it was negative. The book value of share is less than face value i.e. Rs100, because of cumulative loss but the trend is in increasing rate. The table reflects that ADBNL has performing better than the previous years but still poor profitability position of the bank.

4.2 Accounting Tools

4.2.1 Income and Expenditure Analysis

Income and expenditure are the main indicators of the financial performance of the business firm. The income and expenditure statement provides a financial summary of the firm's operating results during the period specified. In this study the analysis of operating income and expenditure has been made as per the following details;

4.2.1.1 Operating Income

The sources of operating income are interest earnings, exchange earnings, commission earnings and other operating incomes.

Table 4.36

Income Analysis

(Rs. in Million)

Fiscal Year	**061/062**	**062/063**	**063/064**	**064/065**	**065/066**
Interest Income	3,915.22	4,033.54	4,623.10	3,363.73	4,231.14
Percentage	90.28	92.49	94.11	88.15	78.93
commission and Discount	42.65	42.26	49.82	71.14	90.04
Percentage	0.98	0.97	1.01	1.86	1.68
Foreign Exchange Income	-11.94	2.83	-14.06	11.95	22.1
Percentage	-0.28	0.06	-0.29	0.31	0.41
Non Operating Income	92.78	117.76	7.42	18.34	634.99
Percentage	2.14	2.7	0.15	0.48	11.85
Other Income	286.31	164.86	232.03	350.68	382.25
Percentage	6.6	3.78	4.72	9.19	7.13
Total Income	**4,336.97**	**4,361.27**	**4,912.37**	**3,815.84**	**5,360.52**

Source: Annual Financial Report of ADBNL

a) Interest Income

Interest income is the main sources of income of the commercial banks. The bank charges interest on loans and advances provided by them. Interest income also includes interest earned from investment in government securities, interest on balance with other banks, money at call and inter-bank lending. The above table shows the interest income of EBL that remained 90.28%, 92.49%, 94.11%, 88.15%, and 78.93% in the respective year of the study period. Interest income occupies the large portion in the total income of the bank.

b) Commission and Discount Income

Bank provides different services to their customer needs such as remittance facility, purchase and discount of bills of exchange, letter of credit, guarantees standing instructions, agency function for their services bank charge commission and discount to their clients. Commission and Discount earned by the ADBNL remained 0.98%, 0.97%, 1.01%, 1.86% and 1.68% respectively over the study period. Very few portion of total income is earned as commission and discount. It is dominated by interest income.

c) Foreign Exchange Fluctuation Income

Commercial Bank can purchased and sell foreign currencies under the NRB direction. It is one major function of commercial bank. Transaction of foreign currency is one of the major functions of commercial banks. It includes trading gain due to fluctuation in the exchange rule. The income from fluctuation of foreign currency exchange rate in Rs- 11.94, 2.83, -14.06, 11.95 and 22.1 million that constitutes -0.28%, 0.06%, -0.29%, 0.31% and 0.41% respectively of total income earned by ADBNL in respective study period. In year 061/062 and 063/064 was negative due to foreign exchange loss.

d) Non Operating Income

Non operating income is another source of income. This income is generated by non operating activities i.e. income from sells of assets, income from tenders, dividend income etc. ADBNL has non operating income to total income of 2.14%, 2.70%, 0.15%, 0.48% and 11.85% respectively over five year period. The portion of non operating income to total income is highly fluctuated.

e) Other Income

Income other than above comes under other income. Other income of ADBNL includes safe deposit vault rental income, telex/T.T charges and other services charges. Other income of EBL appeared to be 6.6%, 3.78%, 0.15%, 0.48% and 7.13% in the respective study periods. It shows that other income to total income is in fluctuating trend.

4.2.1.2 Operating Expenses

The expenditure heads of the bank are interest expense, personnel expense and other operating and non-operating expenses.

Table 4.37

Expenditure Analysis

(Rs. in Million)

Fiscal Year	061/062	062/063	063/064	064/065	065/066
Interest Expense	1,487.50	1,439.84	1,605.87	1,043.81	1,157.07
Percentage	51.32	40.68	48.87	32.21	28.42
Staff Expenses	963.18	1,775.34	1,306.80	1,849.13	2,486.72
Percentage	33.23	50.16	39.77	57.06	61.07
Other Operating Expenses	447.88	254.89	277.55	288.02	300.69
Percentage	15.45	7.2	8.45	8.89	7.38
Bonus Facility	0	69.33	95.59	59.98	127.41
Percentage	0	1.96	2.91	1.85	3.13
Total Income	**2,898.56**	**3,539.40**	**3,285.81**	**3,240.94**	**4,071.89**

Source: Annual Financial Report of ADBNL

Various expenses are borne by bank in course of granting services to its customer. Banks need to pay interest for the deposits and borrowings. It has to pay salaries and provide other facilities to its staffs. It also has to spend significant amount for day to day operation.

a) Interest Expenses

Commercial banks pay interest on various types of deposits and loan taken from the outsider parties, like other banks and financial institutions. It is the major part of the banks expenses. As observed the interest expenses out of total expenses of ADBNL recorded 51.32%, 40.68%, 48.87%, 32.21%, and 28.42% in respective study period. The highest percentage is 51.32% in year 061/062 and lowest is 28.42% in year 065/066.

b) Staff Expenses

Staffs are the wealth of an organization. They provides service to the customer in a return bank have to pay remuneration. Staff expenses includes salary, allowances, P.F. contributions, training expenses, uniform, medical allowance, insurance, gratuity, festival allowances etc. It is seen that the staff expenses in ADBNL were 33.23%, 50.16%, 39.77%, 57.06% and 61.07% of total expenses in the respective study period.

c) Other Operating Expenses

Operating expenses includes expenses such as rent, water and electricity, repair and maintenance, insurance premium, postage, telephone, telex, office equipment, traveling expenses, printing and stationary newspaper, advertisement, meeting expenses, depreciation, amortization, security expenses etc. Operating expenses covers 15.45%, 7.20%, 8.45%, 8.89% and 7.37% of total expenses incurred in respective study period. In year 061/062 it is maximum occupying 15.45% of total expenses and in year 062/063 it is minimum occupying 7.20% of total expenses.

d) Bonus Facility

To increase staffs performance organization should provide incentive to their staff. Bonus pays a portion of profit to the staff as bonus which is reward for their services but it also increases the expenses of the bank. So the organization distributes certain portion of profit as bonus. To motivate staff organization provides bonus. It depicts that expenses for bonus in ADBNL remained 0%, 1.96%, 2.91%, 1.85% and 3.13% in respective year of the study period. In year 061/062 the bonus facility is zero due to operating loss.

4.3 Statistical Tools

The statistical analysis includes various methods of measuring relationship between two or more than two variables as well as their significance. The relationship between different variable related to the study would be drawn out using statistical tools. There are various statistical tools that can be used to analyze the data for example mean, standard deviation, coefficient of variation, correlation analysis, regression analysis etc. The statistical tool used in this analysis is as follows:

4.3.1 Coefficient of Correlation (r)

Correlation is a statistical tool that measures the relationship between/among variables; it shows the degree and direction of such relationship for the total deposit and loan and advances. The relation between the data may be either positive or negative. It can be determined by different ways such as graphical representation, formula method etc. When both variables deviate in the same direction, it is said to be the condition of positive correlation and vice versa is said to be negative.

a) Co-efficient of Correlation between Total Deposit and Net Profit

The relationship between Total Deposit and Net Profit is measured and tested by Karl Pearson's Co-efficient of Correlation. A positive Correlation here would imply that the Bank is able to grow its Profit in line with its total deposits increment. Insignificant or negative value would point out the weakness of management to keep the Profit in line with the utilization of total deposit.

Table 4.38

Computation of Correlation Co-efficient between Total Deposit and Net Profit

Correlation 'r'	Probable Error (P.E)	6 P.E.	Remarks
0.85	0.08	0.48	Significant

Source: Annex 1(i)

The above analysis shows the degree of relationship between total deposit and net profit. The independent variable is total deposit (X) and the dependent variable is Net Profit(Y). The correlation coefficient between total deposit and net profit of the bank is 0.85 and probable error multiplied by 6 is less than (r). So it can be concluded that there is very strong positive and significantly correlation between total deposit and net profit during the study period.

b) Co-efficient of Correlation between Total Deposit and Loan and Advances

The coefficient of correlation between total deposits and loan and advances measures the degree of relationship between them. In our study, we have taken deposit as an independent variable denoted by (x) and loan and advance as dependent variable (y). The main objective of calculating ‘r’ between these two variables is to justify whether deposits are significantly used as loan and advances or not.

Table 4.39

Computation of Correlation Co-efficient between Total Deposit and Loan & Advances

Correlation ‘r’	Probable Error (P.E)	6 P.E.	Remarks
0.96	0.02	0.12	Significant

Source: Annex 1(ii)

Above calculation shows coefficient of correlation between deposit and loan & advances is 0.96 which shows high degree of positive correlation between these two variables. Similarly considering the value of (r) i.e. 0.96 and comparing it with significant of relationship i.e. 0.02, we can say that value of r is more than 6P.E. that reveals that there is highly significant relationship between deposit and loans and advances. Therefore the bank may raise the volume of loan and advances with rise in the volume of total deposit. It also shows that ADBNL is successful to mobilize its fund in proper way in loan and advances.

c) Co-efficient of Correlation between Total Deposit and Net Investment

The coefficient of correlation between total deposits and loan and net investment measures the degree of relationship between them. In our study, we have taken deposit as an independent variable denoted by (x) and net investment as dependent variable(y).The purpose of calculating 'r' is to judge whether deposits are significantly mobilized as Investments or not.

Table 4.40

Computation of Correlation Co-efficient between Total Deposit and Net Investment

Correlation 'r'	Probable Error (P.E)	6 P.E.	Remarks
0.95	0.03	0.18	Significant

Source : Annex 1(iii)

The above calculation shows the coefficient of correlation between deposit and net investment is 0.95. It shows high degree of positive correlation between two variables, the correlation coefficient appeared greater than six times than the probable error i.e. 0.95> 0.18. It implies that the correlation between total deposit and investment of the bank are correlated at significant level and increase in the amount of total deposit increases the investment of bank.

d) Co-efficient of Correlation between Net Investment and Net Profit

The coefficient of correlation between net investment and net profit measures the degree of relationship between them. In our study, we have taken net investment as an independent variable denoted by(x) and net investment as dependent variable(y).The main objective of calculating 'r' between those two variable is to judge whether investment are significant to the profit or not.

Table 4.41

Computation of Correlation Co-efficient between Total Investment and Net Profit

Correlation 'r'	Probable Error (P.E)	6 P.E.	Remarks
0.67	0.17	1.02	Nothing can be concluded

Source : Annex 1(iv)

The above calculation shows that the coefficient of correlation between net investment and net profit is 0.67. This indicates that there is a positive relation between investment and profit. The calculated value of (r) i.e. 0.67 is lower than six times of probably error or 6P.E. (i.e. 1.02). So we can conclude that there is nothing can be concluded between net investment and net profit. It means that ADBNL has unable to make profit from the investment.

e) Co-efficient of Correlation between Total Income and Total Expenses

The coefficient of correlation between total income and total expenses measures the degree of the relationship between them. In our study, we have taken total income as an independent variable denoted by(x) and total expenses as dependent variable(y).The main objective of calculating ‘r’ between those two variable is to judge whether total income is significant to the total expenses or not.

Table 4.42

Computation of Correlation Co-efficient between Total Income and Total Expenses

Correlation ‘r’	Probable Error (P.E)	6 P.E.	Remarks
0.18	0.29	1.74	Nothing can be concluded

Source : Annex 1(v)

The above analysis shows the degree of relationship between total income and total expenses. The correlation coefficient between income and expenses is low but positive. The correlation coefficient 0.18 is less than 6 P.E i.e. 1.74. So, the relationship between income and expenditure can not be concluded. It means the degree of total income is not affected by total expenses.

4.3.4 Trend Analysis

Trend analysis, present or future analysis, is utilized to see the movement of upward or downward by the help of given numerical values of some specified period of time. Here, trend analysis of net profit, total deposit, investment and loans and advances of ADBNL are done. The forecast is made for the next five years. For the estimation of linear trend line following formula has been used.

$Y = a + b X$

Where,

Y = dependent variable

X = Independent variable

a = intercept of the line.

b = slope of the line (shows the average changes in the value of Y as a result of one unit change in the value of X)

The value of the constant "a" and "b" can be determined by solving the following two normal equations:

$\Sigma Y = na + b\Sigma X$……………………..….(i)

$\Sigma XY = a\Sigma X + b\Sigma X$………………….(ii)

Since, $\Sigma X = 0$

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

a) Trend Analysis of Net Profit

Table 4.43

Trend Value of Net Profit

(Rs. in Million)

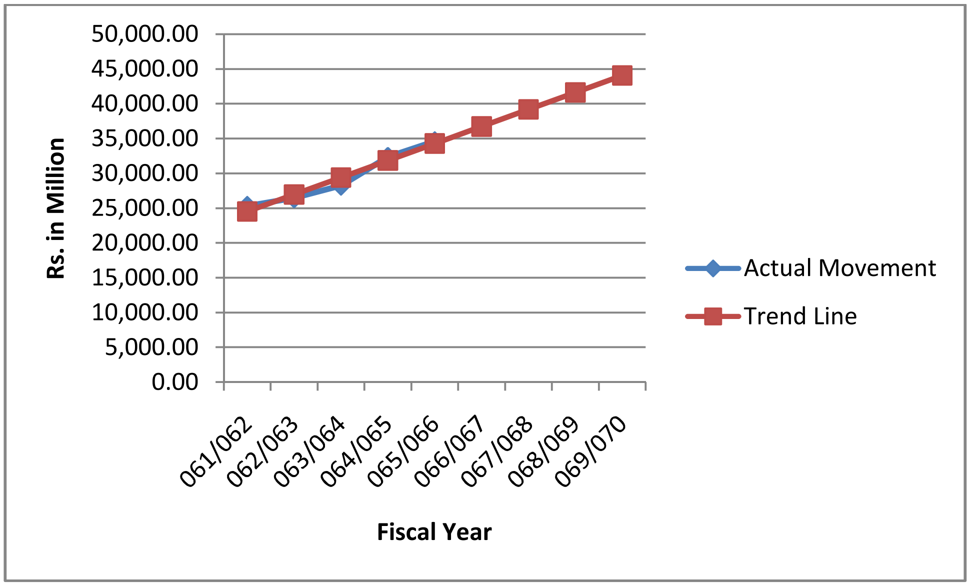
Year	Actual Value	Trend Value
061/062	(2,835.32)	(1,559.62)
062/063	353.52	(749.46)
063/064	1,058.45	60.70
064/065	669.24	870.86
065/066	1,057.60	1,681.02
066/067		2,491.18
067/068		3,301.34
068/069		4,111.50
069/070		4,921.66
070/071		5,731.82

Source: Annex II (i)

Figure 4.1

Trend Line of Net Profit

(Rs. in Million)



Above table and figure shows the amount of profit for five years 061/062 to 065/066 and forecasted value for next five year 066/067 to 070/71. Y intercept (a) and slope of trend (b) of the profit appeared to be 60.70 and 810.13 i.e. y=60.70+810.13x.

Comparing the actual profit and trend value of profit except in the FY 062/063 and 063/064, the actual profits are higher than trend value of profit. It shows the bank was more successful in earning profit in these financial years over the study period. On the basis of above trend equation forecasted profit for coming five years would be Rs.2491.18, 3301.34, 4111.50, 4921.66 and 5731.82 million respectively. Trend analysis shows that its profit will increase in coming years.

b) Trend Analysis of Total Deposit

Table 4.44

Trend Value of Total Deposit

(Rs. in Million)

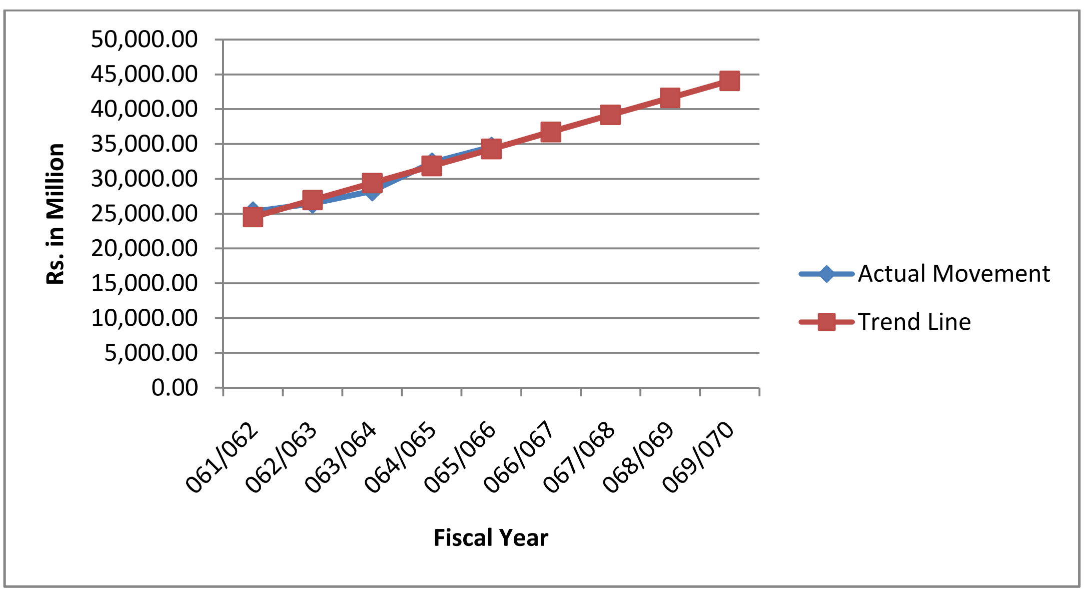
Year	Actual Value	Trend Value
061/062	27,223.05	27,637.91
062/063	29631.82	29,517.42
063/064	32,416.36	31,396.93
064/065	32,553.83	33,276.44
065/066	35,159.61	35,155.95
066/067		37,035.46
067/068		38,914.97
068/069		40,794.48
069/070		42,673.99
070/071		44,553.50

Source: Annex I I (ii)

Figure 4.2

Trend Line of Total Deposit

(Rs. in Million)



Above table and figure shows the amount of profit for five years 061/062 to 065/066 and forecasted value for next five year 066/067 to 070/71. Y intercept (a) and slope of trend (b) of the profit appeared to be 31396.93 and 1879.51 i.e. y=31396.93+1879.51x.

Comparing the actual deposit and trend value of deposit except in the FY 062/063 and 063/064, the actual deposits are higher than trend value of deposit. It shows the bank was more successful in collecting deposits in these financial years over the study period. On the basis of above trend equation forecasted total deposit for coming five years would be Rs.37035.46, 38914.97, 40794.48, 42673.99 and 44553.50 million respectively. Trend analysis shows that its total deposit will increase in coming years.

c) Trend Analysis of Investment

Table 4.45

Trend Value of Investment

(Rs. in Million)

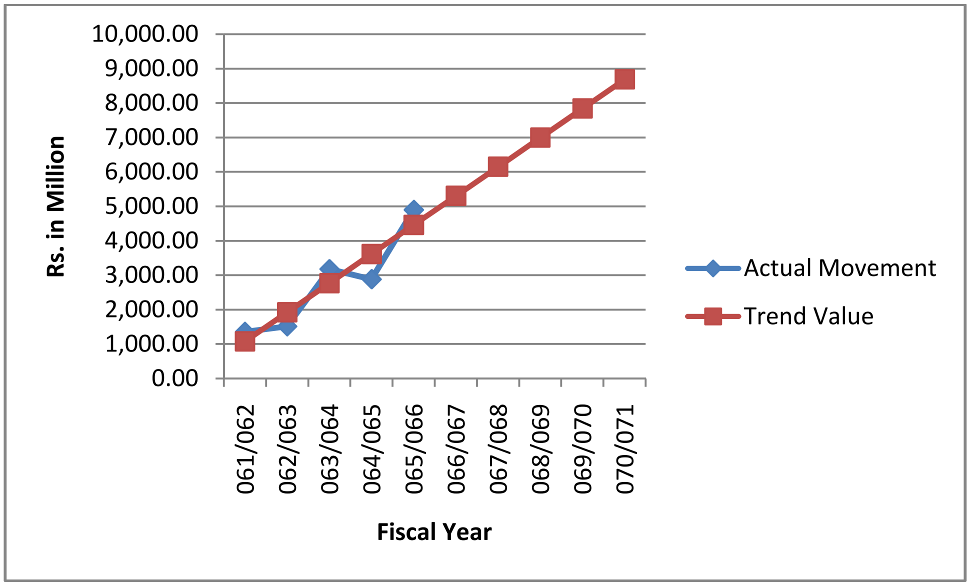
Year	Actual Value	Trend Value
061/062	1,355.83	1,074.31
062/063	1,511.33	1,919.39
063/064	3,177.46	2,764.47
064/065	2,881.66	3,609.55
065/066	4,896.06	4,454.63
066/067		5,299.71
067/068		6,144.79
068/069		6,989.87
069/070		7,834.95
070/071		8,680.03

Source: Annex II (iii)

Figure 4.3

Trend Line of Investment

(Rs. in Million)



Above table and figure shows the amount of profit for five years 061/062 to 065/066 and forecasted value for next five year 066/067 to 070/71. Y intercept (a) and slope of trend (b) of the profit appeared to be 2764.47and 845.08 i.e. y=2764.47+845.08x.

On the basis of above trend equation forecasted investment for coming five years would be Rs.5299.71, 6144.79, 6989.87, 7834.95 and 8680.03 million respectively.

d) Trend Analysis of Loan and Advances

Table 4.46

Trend Value of Loan and Advances

(Rs. in Million)

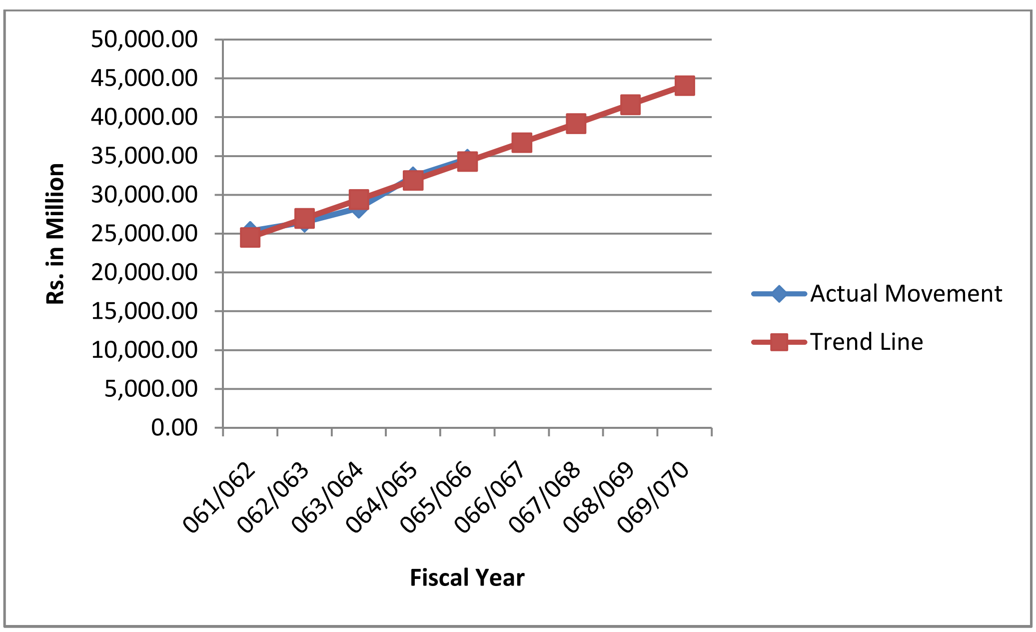
Year	Actual Value	Trend Value
061/062	25,305.08	24,508.70
062/063	26,451.75	26,951.00
063/064	28,255.07	29,393.29
064/065	32,324.21	31,835.59
065/066	34,580.33	34,277.89
066/067		36,720.19
067/068		39,162.49
068/069		41,604.79
069/070		44,047.09
070/071		46,489.39

Source: Annex II (iv)

Figure 4.4

Trend Line of Loan and Advances

(Rs. in Million)



Above table and figure shows the amount of profit for five years 061/062 to 065/066 and forecasted value for next five year 066/067 to 070/71. Y intercept (a) and slope of trend (b) of the profit appeared to be 26.07and 3.51 i.e. 29,383.29+2,442.30x.

On the basis of above trend equation forecasted loan and advances for coming five years would be Rs. 36,720.19, 39,162.49, 41,604.79, 44,047.09 and 46,489.39 million respectively.

4.4 Major Finding of the Study

Various analyses of the ratios have been performed for the study period of five years from the FY 061/062 to 065/066 to find out the performance of ADBNL. The major finding of the analysis of financial statement of ADBNL has been presented in the table below.

- From the analysis of current ratio it is found that the mean ratio of ADBNL is 0.9782. Only in year 064/065 and 065/066 the current assets are exceed to the current liabilities. The current ratio analysis of the bank over the five years period indicates that the bank is unable to meet its short-term obligations. In over all, the bank has poor liquidity position.
- The analysis indicates that ADBNL has greater capacity to meet its daily customers' cash requirement but it also indicates that the bank is unable to utilize the cash and bank balance due to the high cash and bank balance to current assets ratio.
- Loan and advances to current ratio indicates that the high portion of current assets is disbursement as loan and advances. It shows the bank is sufficiently mobilizing their fund.
- Cash and bank balance to current and saving deposit fluctuated over the study period. It can be observed that ADBNL may not be able to meet its immediate obligation as the bank balance.
- Cash and bank balance to total deposit ratio of ADBNL shows its liquidity position was weak over the five year of study period but the bank has invested large amounts in various sectors.

- Saving deposit to total deposit ratio shows that the bank has collected deposit more than 50% as saving deposit over the study period of five years.
- Loan and advance to total deposit ratio is in increasing trend. As per banking practice, banks maintain the ratio 70-75% so, the ratio is slightly high. It shows the bank is successfully utilizing its funds.
- Loan and advance to fixed deposit ratio are increasing except FY 062/063 during the study period. So the bank has efficiently utilized the high interest bearing fixed deposit in the loan and advance.
- Over all loan and advances to saving deposit ratios were satisfactory over the study period of five years.
- Investment to total deposit ratios are fluctuating over the study period. The mean ratio is 9.02. It shows the investment of bank in government securities and other financial and non-financial institutions are very low.
- Performing assets to total assets ratio, ADBNL has maintained high ratio throughout the study period.
- Performing assets to total debt ratio are in increasing trend. Last-last years the ratios were very low but near years the ratios are in satisfying level, which shows ADBNL is able to utilizing the outsiders fund in income generation.
- The analysis indicates that the portion of non performance loan and advances to total loan and advances has been gradually decreasing. It seems ADBNL has utilizing its loan and advances to performance loan and advances rather than no performance loan and advances.
- Total debt to total assets ratio shows that the larger portion of the bank's asset has been financed through outsiders' fund. The aggregate 95% of assets was financed by outsider's fund. It shows the bank has high risk of creditors and liquidation.
- Debt equity ratio of ADBNL shows that in its capital structure more than 95%of capital was funded by outsiders' fund.
- Interest coverage ratio of ADBNL was lower over the ten year of study period. This indicates there excessive use of debt for which interest to be paid.

- Return on assets during the study period was less than 3%. This shows that profitability with respect to financial resources investment of bank assets was unsatisfactory.
- Return on shareholder’s equity is highly fluctuated. It varies from minimum of (42.32) % to 83.14% over the study period. The analysis indicates that the bank is unable to utilize its capital.
- The mean interest earned to total assets of the bank is 10.05% which does not indicates that the bank has properly utilizing its total assets to generate income.
- The ratio return on loan and advances is very low during the study period. The mean ratio is 1.76% over the five year study period. It shows that the bank is unable to proper utilization of loan and advances.
- The mean net profit to total deposit ratio is 1.95%. The analysis indicates that the total deposit is unable to generate profit.
- Total interest expenses to total interest income ratio decreased over the period. ADBNL reduced its ratio 37.99% to 27.35%. It shows that the bank is more successful in later years in allocating interest bearing debt in profitable sectors.
- The average net interest margin ratio of ADBNL is 7.16%. This ratio measures the net interest income from the total interest earning assets. The study shows that the bank is unable to proper utilize the interest earning assets.
- The net non-interest margin ratio is negative over the study period but in increasing trend. It shows the bank is more successful in later in generating non interest income.
- The net profit margin ratio of the bank indicates that the bank is not able to better generation of operating income through utilization of funds.
- The average net operating margin is -0.82 during the five year study period. This analysis shows that three of five year study the ratios are negative, it indicates the ADBNL has low operating performance.
- The assets utilization ratio indicates that the bank is not properly utilizing the total assets to generate operating revenue.

- The operating efficiency ratio shows that the bank has low operation efficiency. Because the bank's operating expenses is higher than the operating income.
- The average staff expenses to total income ratio is 36.78% over the study period. It shows that the bank has problem of over staffing or low employees' performance.
- Loan loss provision to total income ratio and loan loss provision to total deposit ratio shows that the bank is lending its fund to the high risk assets.
- The average loan loss coverage ratio is 3.94%. It means major portion of loan were risky. These ratios shows ADBNL has not been successful to fore see the quality of loans lent and its Loan Loss Coverage cannot be ranked as satisfactory.
- The average accrued interest to total income ratio is 137.25% over the study period. It means major portion of loan were lent to risky sectors.
- The earning per share of the bank is very low. The average earning per share is Rs. 8.22.
- The study shows that the bank has never paid dividend to its shareholders. And the bank had not listed in NEPSE before the study period.
- The book value per share of the bank is less than the par value over the study period.
- The income and expenditure analysis shows that the bank main source of income is interest. The bank has more than 75% of income are generated by interest earning. Another main source of bank is other income includes safe deposit vault rental income, telex/T.T charges, other services charges etc. The portion of income from commission and discount and foreign exchange income are very low or less than 2%. Its staff expenses dominant other expenses aggregate 50% of total expenses over the study period. The aggregate interest expense is about 40%. It shows that the bank has over staffing and excessive expenditures to its staff.
- The correlation co-efficient between total deposit and net profit, total deposit and loan and advances and total deposit and net investment are 0.85, 0.96 and 0.95 respectively, which indicates they are highly positive correlated and significant. But the correlation co-efficient between net investment and net profit and total income

and total expenses are 0.67 and 0.18 respectively over the study period, which indicates that they are positive correlated but insignificant.

- The trend analysis shows that the trend of net profit, total deposit, investment and total loan and advances are in increasing trend.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter is an accomplished specific and indicative enclose which contains summary and of the present situation under the topic of the study is defined on summary. Conclusions are conclusion of finding and recommendations. Brief introduction to all chapters of the study and genuine information analysis of applicable data by using various financial and statistical tools, which presents strengths, weakness, opportunities and threats of the bank. And suggestions are obtainable in recommendation, which is arranged on the based from finding and conclusions.

5.1 Summary

The primary objectives of the study is to analyze the overall performance of ADBNL, however other objectives are to examine the overall performance of ADBNL in terms of liquidity, activity, profitability, leverage, earnings, capital adequacy, to study the achievement of ADBNL, to evaluate the effectiveness of collection deposit and their utilization to examine the causes of gap existing between deposits and loan, investment etc., to provide suggestion and recommendation for the improvement of future performance and maximum utilization of deposit.

The principal activities of the bank in the past five years continued to be consumer and corporate banking, trade finance, credit card service and foreign exchange dealing. The number of cards issued by the bank is increasing and the bank now has the critical mass in its account base. The main activity of the bank is to providing institutional credit for enhancing the production and productivity of the agricultural sector in the country.

We can conclude that financial analysis is done to determine the banks financial position in order to identify its current strength and weaknesses and to suggestion that might enable the firm to take advantage of its strengths and correct its weaknesses. The study is about the financial performance of the ADBNL based on its financial data of five years. By using financial and statistical tools, the overall financial performance of the bank has tried to analyze. The various ratios have revealed the financial condition of the bank over the five years. Income and expenditure analysis has showed the percentage share of each income and expenses head. Correlation analysis helps to establish the relationship between two variables which can be useful to know how one variable affect the another variable. Likewise trend analysis is used to find out the trend of some very important elements like total deposit, loan and advance, net profit and investment on the basis of the past data of the bank. This can be used in predicting the value of these elements.

Analyzing the credit sector and the bank guarantee, the bank is trying to avoid unnecessary risk than the past years. By mobilizing its funds more in loans and advances, the bank could have increased its profit. But from the tabulated figures, it is evident that ADBNL had preferred to invest in secured sectors like government securities and shares and debentures than in lending.

The profitability of the bank has been good and increasing than the previous years. However the grown rate is highly fluctuating. As per the data analysis deposits increased tremendously, it is greater in last year of observation in comparison to first year of observation. However the rate of the increment is fluctuating during the study period. The total investment of the bank has been increasing over the year(refer Annex -1), which is mainly due to the bank's strategy of sate lending and also as a result of increase in customer deposits and limited opportunities in present scenario with increase in loans and advances, the bank has been holding adequate provisions for loan loss.

5.2 Conclusion

During the study period of past five years, i.e. from 061/062 to 065/066 various ratio analyses have been performed to find out the financial performance of ADBNL. The major findings of the study are in chapter IV, section 4.4. Based on the findings, the conclusions have been drawn.

The current ratio of the bank over the five years is 0.9782 on an average. The current ratio of 2.0 is occasionally cited as acceptable, but acceptability of the value depends on the industry on which a firm operates. For the banks and the utility firms, current ratios of 1.0 or above would be considered acceptable. Therefore, the liquidity position in terms of current ratio of ADBNL is in below standard. The cash and bank balance to current assets is slightly low to make payment for the cheques by its customers. The overall loan and advances disbursement with respect to the current assets is satisfactory. Cash and bank balance to current and saving deposits indicated that the bank is unable to meet its immediate obligation as the bank balance. The cash and bank balance to total deposit ratio shows that the bank is maintaining its cash reserve as per central bank directives. The analysis also reveals that the share of saving deposit is higher than the total deposit, which indicates that bank is reducing its interest expenses. In overall, the liquidity position of ADBNL is slightly poor and the bank is unable to meet its short-term obligations.

Loan and advances to total deposit ratio measures the extent to which the bank is successful to utilize the outsider's fund (total deposit) in profit generating purpose. The result indicates that the bank is mobilizing its total deposit in loans and advances satisfactorily. Loan and advances to highest interest bearing deposit is utilized for income generating purpose. The result of the analysis indicates that the bank has better mobilization of its saving deposit in loans and advances for income generating purpose. Loans and advances to fixed deposit ratio measures how many times the amount is used in loans and advances in comparison to fixed deposit. The result of the analysis indicates that the bank has the best mobilization of its fixed deposit in loans and advances for income generating purpose. But the bank is unable to utilize the total deposit to invest in other profit generating sector. The analysis also shows that the bank has comparatively poor performing assets to the total assets. The performing assets are lower than the total debt over the study period. Overall, the activity ratio of ADBNL indicates that the bank has utilized its resources in a best way but in satisfactory way to maximum its wealth.

Debt to assets ratio exhibits the proportion of outsiders' fund used in financing total assets and debt to equity ratio indicates the relationship between the long-term funds provided by creditors and those provided by the firm's owners. The result of the analysis indicated that the bank has the high ratios of debt to assets and debt to equity, which reveals that the creditors have invested more in bank than owners. The interest coverage ratio of the bank indicates interest charge in debt is higher than the EBIT. In overall analysis the bank has financed by shareholders' is very low. The creditors have dominated in the bank's financial mix.

Interest earning is the major source of income of a commercial bank. Interest earned to total assets ratio reflects the portion of interest earned by the bank from the total income. The result of the analysis indicates the interest earned in comparison to the assets is quite low. The analysis return on total assets is very low. The return on equity measures the income on the owner's investment. The ratio indicates how well the bank has used the resources of the owners. The result of the analysis shows that ADBNL return on shareholders' equity is very low, which exhibits the poor utilization of shareholders' resources. The return on loan and advances and return on total deposit are also very low, which indicates that ADBNL is unsuccessful to utilize its funds. Total interest income is reasonably higher than the total interest expenses. The net interest income in interest earning assets is poor. It indicates that the bank has not maintained sufficient utilization of resources. The net non interest margin is negative and net profit margin is not sufficient. The net operating margin ratio analyses the operating revenue generated by use of total assets. The average ratio is negative which means the bank is unable to utilize successfully the total assets to generate the profit. The assets utilization ratio indicates that ADBNL is unable to generate sufficient operating revenue through the utilization of total assets. The operation efficiency ratio of the bank indicates that the total operating expenses is higher than the total operating income. Comparison the total income with the total staff expenses the bank has high expenditure to its staff than the performance of the bank. Therefore, the result of the profitability ratio analysis of ADBNL indicates that the overall performance of the bank is not effective in generating the profit and hence maximizing its wealth.

Loan loss provision to total income ratio was very high throughout the study period that indicates ADBNL is unable to reduce its loan losses. Loan loss provision on total deposit is also high in respect of deposit, which indicates the major portions of loan are risky. Loan loss coverage ratio of ADBNL indicates that assets financed by the bank are in risky sector. The accrued interest is higher than the interest income. The overall assets quality ratio of ADBNL indicates the quality of assets contained by the bank is poor.

The earning per share (EPS) represents the amount earned on behalf of each outstanding share of common stock. Hence we can conclude that ADBNL's earning per share is very low which reflects poor profitability position of the bank. The bank has not paid dividend to its shareholders' due to the cumulative loss remaining and the book value per share is lower than the par value of bank. Which indicates the overall financial performance of bank is very poor.

The income and expenditure analysis of the bank indicates that the major portion of income is generated by interest income and non operating income is the second source of income. The commission and discount income and foreign exchange income are in very portion of total income. The expenditure analysis indicates that the overall staff expenses are higher than the interest expenses within the study period. It can be conclude that the bank has facing the over staffing problem and the performance of employees is very low with the comparison of income.

The statistical tools are one of the most important tools to analyze the data. The correlation analysis indicates that the net profit, loan and advances and investment will increase if the total deposit increases, due to the highly positive correlation. The correlation between investment and profit and income and expenditure are insignificant. The trend analysis shows that the bank has increasing trend of net profit, total deposit, loan and advances and investment.

5.3 Recommendation

On the basis of study on financial performance analysis of Agriculture Development bank, the following recommendations are made.

- The liquidity ratio is less than normal standard ratio, so the bank should maintain their liquidity position in normal standard.
- The bank should focus its business more in credit cards, wealth management and global market and must compete with the private and joint venture banks.
- The bank should try to increase non-interest bearing deposits.
- The bank should invest in non risky sector and must reduce loan losses.
- The bank has to increase its loan and advances in less risky sector.
- It is recommended that the bank has to increase its investment in the profitable sector rather than the loan and advances.
- ADBNL has greater portion of debt in capital. Bank should be aware of the possible risk that may arise due to slackness in the business activities.
- Total operating expenses is higher than the total operating revenue.
- The net profit of the bank is not satisfactory as it is increasing by very little percentage in the recent years. The bank should take the matter seriously. Profit is essential for the survival and growth of the bank. The overall profitability of the bank is in increasing trends. The interest income, total income and net profit of the bank are increasing trend. However, the bank should try to increase its interest income, total income and net profit by increasing the volume of its loan and advances investment.
- The staff expense is very high than the comparison of income, so the bank must reduce staff expenses and to increase the profit the bank must cut off the unnecessary costs.

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APPENDICES

Annex 1

Coefficient of Correlation

i) Computation of Correlation Co-efficient between Total Deposit and Net Profit

(Rs. in Million)

Fiscal Year	Total Deposit(X)	Net Profit (Y)	XY	X^2	Y^2
061/062	27,223.05	(2,835.32)	7,186,010.41)	41,094,242.34	,039,031.83
062/063	29,631.82	353.52	10,475,584.72	78,044,607.23	124,979.84
063/064	32,416.36	1,058.45	34,311,048.76	50,751,683.24	,120,313.42
064/065	32,553.83	669.24	21,786,302.86	59,751,683.24	447,881.33
065/066	35,159.61	1,057.60	37,184,819.23	36,198,190.51	,118,518.69
Total	**156,984.66**	**303.49**	**26,571,745.17**	**65,909,012.44**	**,850,725.11**

Source: Annual Financial Report of ADBNL

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

$$= \frac{5 \times 26571745.17 - 156984.66 \times 303.49}{\sqrt{5 \times 4965909012.44 - (156984.66)^2}\sqrt{5 \times 10850725.11 - (303.49)^2}}$$

$$= \frac{85214724.93}{\sqrt{185361684.22}\sqrt{54161516.54}}$$

$$= \frac{85214724.93}{13614.76 \times 7359.45}$$

$\mathbf{r} = 0.85$

Calculation of Probable Error P.E(r)

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

$$= 0.6745 \frac{1-(0.85)^2}{\sqrt{5}}$$

$$= 0.08$$

ii) Computation of Correlation Co-efficient between Total Deposit and Loan & Advances

(Rs. in Million)

scal Year	Total Deposit(X)	Loan & Advances(Y)	XY	X^2	Y^2
)61/062	27,223.05	22,638.26	616,282,269.11	741,094,242.34	512,490,603.12
)62/063	29,631.82	24,900.91	737,859,325.19	878,044,607.23	620,055,495.23
)63/064	32,416.36	27,252.33	883,421,402.87	1,050,751,683.24	742,689,671.22
)64/065	32,553.83	30,589.43	995,802,965.21	1,059,751,683.24	935,713,112.04
)65/066	35,159.61	32,603.10	1,146,312,134.59	1,236,198,190.51	1,062,961,845.44
Total	**156,984.66**	**137,984.03**	**4,379,678,096.97**	**4,965,909,012.44**	**3,873,910,727.04**

Source: Annual Financial Report of ADBNL

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

$$= \frac{5 \times 4379678096.97 - 156984.66 \times 137984.03}{\sqrt{5x4965909012.44 - (156984.66)^2}\sqrt{5x3873910727004 - (137984.03)^2}}$$

$$= \frac{237015134.37}{\sqrt{185361684.22}\sqrt{329962228.33}}$$

$$= \frac{237015134.37}{13614.76 \times 18164.86}$$

r = 0.96

Calculation of Probable Error P.E(r)

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

$$= 0.6745 \frac{1-(0.96)^2}{\sqrt{5}}$$

$$= 0.02$$

iii) Computation of Correlation Co-efficient between Total Deposit and Net Investment

(Rs. in Million)

scal Year	Total Deposit(X)	Net nvestment(Y)	XY	X^2	Y^2
061/062	27,223.05	1,355.83	36,909,901.16	741,094,242.34	1,838,282.81
062/063	29,631.82	1,511.33	44,783,455.34	878,044,607.23	2,284,118.43
063/064	32,416.36	3,177.46	03,001,711.62	,050,751,683.24	0,096,257.85
064/065	32,553.83	2,881.66	93,809,022.00	,059,751,683.24	8,303,957.19
065/066	35,159.61	4,896.06	72,143,623.53	,236,198,190.51	3,971,420.88
Total	**156,984.66**	**13,822.34**	**50,647,713.65**	**,965,909,012.44**	**6,494,037.17**

Source: Annual Financial Report of ADBNL

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

$$= \frac{5\,x\,450647713.65 - 156984.66\,x\,13822.34}{\sqrt{5x4965909012.44 - (156984.66)^2}\sqrt{5x46494037.17 - (13822.34)^2}}$$

$$= \frac{83342544.89}{\sqrt{185361684.22}\sqrt{41412982.60}}$$

$$= \frac{83342544.89}{13614.76\,x\,6435.29}$$

r = 0.95

Calculation of Probable Error P.E(r)

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

= $0.6745\dfrac{1 - (0.95)^2}{\sqrt{5}}$

= 0.03

iv) Computation of Correlation Co-efficient between Net Investment and Net Profit

(Rs. in Million)

iscal Year	Net Investment(X)	Net Profit (Y)	XY	X^2	Y^2
061/062	1,355.83	(2,835.32)	(3,844,218.26)	1,838,282.81	8,039,031.83
062/063	1,511.33	353.52	534,292.76	2,284,118.43	124,979.84
063/064	3,177.46	1,058.45	3,363,179.02	10,096,257.85	1,120,313.42
064/065	2,881.66	669.24	1,928,519.48	8,303,957.19	447,881.33
065/066	4,896.06	1,057.60	5,178,077.09	23,971,420.88	1,118,518.69
Total	**13,822.34**	**303.49**	**7,159,850.09**	**46,494,037.17**	**10,850,725.11**

Source: Annual Financial Report of ADBNL

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

$$= \frac{5 \text{ x } 7159850.09 - 13822.34 \text{ x } 303.49}{\sqrt{5\text{x}46494037.17 - (13822.34)^2}\sqrt{5\text{x}10850725.11 - (303.49)^2}}$$

$$= \frac{31604243.21}{\sqrt{41412982.60}\sqrt{54161516.54}}$$

$$= \frac{31604243.21}{6435.29 \text{ x } 7359.45}$$

$\mathbf{r}$ = 0.67

Calculation of Probable Error P.E(r)

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

$= 0.6745 \frac{1 - (0.85)^2}{\sqrt{5}}$

= 0.17

v) Computation of Correlation Co-efficient between Total Income and Total Expenses

(Rs. in Million)

scal Year	Total Income(X)	Total Expense(Y)	XY	X^2	Y^2
061/062	4,336.97	4,415.60	19,150,296.57	18,809,268.77	19,497,507.50
062/063	4,361.27	4,201.81	18,325,209.88	19,020,647.98	17,655,198.57
063/064	4,912.37	3,774.13	18,539,904.07	24,131,341.92	14,244050.09
064/065	3,815.84	5,998.91	22,890,883.06	14,560,616.48	35,986,974.05
065/066	5,360.52	6,791.60	36,406,489.92	28,735,157.55	46,125,813.16
Total	**22,786.95**	**25,182.05**	**115,312,783.50**	**105,257,032.69**	**133,509,543.37**

Source: Annual Financial Report of ADBNL

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

$$= \frac{5 \text{ x} 105257032.69 - 22786.95 \text{ x } 25182.05}{\sqrt{5\text{x}105257032.69 - (22786.95)^2}\sqrt{5\text{x}133509543.37 - (25182.05)^2}}$$

$$= \frac{2741707.76}{\sqrt{7039873.30}\sqrt{33412107.71}}$$

$$= \frac{2741707.76}{2653.28 \text{ x } 5780.32}$$

r = 0.18

Calculation of Probable Error P.E(r)

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

= $0.6745\dfrac{1-(0.18)^2}{\sqrt{5}}$

= 0.29

Annex II

Trend Analysis

i) Calculation of Trend Analysis of Net Profit of ADBNL

(Rs. in Million)

Year (X)	Net Profit(y)	X =(X-063/064)	x^2	xy
061/062	(2,835.32)	-2	4	5,670.64
062/063	353.52	-1	1	(353.52)
063/064	1,058.45	0	0	0
064/065	669.24	1	1	669.24
065/066	1,057.60	2	4	2,115.20
Total	**303.49**	**0**	**10**	**8,101.55**

Source: Annual Financial Report of ADBNL

N=5 $\sum x^2 = 10$

$\sum y = 303.49$ $\sum xy = 8,101.55$

Since, $\sum x = 0$

Let the straight line trend equation between Y and X be given by;

$$Y = a+bx \text{ ----------------------- (i)}$$

$$a = \frac{\sum Y}{N} = \frac{303.49}{5} = 60.70$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{8101.55}{10} = 810.16$$

Substituting the value of ‘a’ and ‘b’, the value of trend line is y=60.70+810.13x.

For Trend Values,

(Rs. in Million)

Year(X)	x=(X-063/064)	a	b	Y=a+bx
061/062	-2	60.70	810.16	(1,559.62)
062/063	-1	60.70	810.16	(749.46)
063/064	0	60.70	810.16	60.70
064/065	1	60.70	810.16	870.86
065/066	2	60.70	810.16	1,681.02
066/067	3	60.70	810.16	2,491.18
067/068	4	60.70	810.16	3,301.34
068/069	5	60.70	810.16	4,111.50
069/070	6	60.70	810.16	4,921.66
070/071	7	60.70	810.16	5,731.82

ii) Trend Analysis of Total Deposit of ADBNL

(Rs. in Million)

Year (X)	Total Deposit(Y)	x=(X-063/064)	x^2	xy
061/062	27,223.05	-2	4	(54,446.09)
062/063	29631.82	-1	1	(29,631.82)
063/064	32,416.36	0	0	0
064/065	32,553.83	1	1	32,553.83
065/066	35,159.61	2	4	70,319.22
Total	**156,984.66**	**0**	**10**	**18,795.14**

Source: Annual Financial Report of ADBNL

N=5 $\sum x^2 = 10$

$\sum y$=156,984.66 $\sum xy$=18,795.14

Since, $\sum x = 0$

Let the straight line trend equation between Y and X be given by;

$$Y = a+bx \text{ .... (i)}$$

$$a = \frac{\sum Y}{N} = \frac{156984.66}{5} = 31396.93$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{18795.14}{10} = 1879.51$$

Substituting the value of 'a' and 'b', the value of trend line is y=31396.93+1879.51x.

For Trend Values,

(Rs. in Million)

Year (X)	x=(X-063/064)	a	b	Y=a+bx
061/062	-2	31396.93	1879.51	27,637.91
062/063	-1	31396.93	1879.51	29,517.42
063/064	0	31396.93	1879.51	31,396.93
064/065	1	31396.93	1879.51	33,276.44
065/066	2	31396.93	1879.51	35,155.95
066/067	3	31396.93	1879.51	37,035.46
067/068	4	31396.93	1879.51	38,914.97
068/069	5	31396.93	1879.51	40,794.48
069/070	6	31396.93	1879.51	42,673.99
070/071	7	31396.93	1879.51	44,553.50

iii) Trend Analysis of Investment of ADBNL

(Rs. in Million)

Year (X)	Net Investment(Y)	x=(X-063/064)	x^2	xy
061/062	1,355.83	-2	4	(2,711.67)
062/063	1,511.33	-1	1	(1,511.33)
063/064	3,177.46	0	0	0
064/065	2,881.66	1	1	2881.66
065/066	4,896.06	2	4	9792.12
Total	**13,822.34**	**0**	**10**	**8,450.79**

Source: Annual Financial Report of ADBNL

N=5 $\sum x^2 = 10$

$\sum y=13,822.34$ $\sum xy=8450.79$

Since, $\sum x=0$

Let the straight line trend equation between Y and X be given by;

$$Y = a+bx \text{ ------------------------------ (i)}$$

$$a = \frac{\sum Y}{N} = \frac{13822.34}{5} = 2,764.47$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{8450.79}{10} = 845.08$$

Substituting the value of 'a' and 'b', the value of trend line is y=2,764.47+845.08x.

For Trend Values,

(Rs. in Million)

Year	x=(X-063/064)	a	b	Y=a+bx
061/062	-2	2,764.47	845.08	1,074.31
062/063	-1	2,764.47	845.08	1,919.39
063/064	0	2,764.47	845.08	2,764.47
064/065	1	2,764.47	845.08	3,609.55
065/066	2	2,764.47	845.08	4,454.63
066/067	3	2,764.47	845.08	5,299.71
067/068	4	2,764.47	845.08	6,144.79
068/069	5	2,764.47	845.08	6,989.87
069/070	6	2,764.47	845.08	7,834.95
070/071	7	2,764.47	845.08	8,680.03

iv) Trend Analysis of Loan and Advances of ADBNL

(In Millions)

Year (X)	Loan and Advances (Y)	x=(X-063/064)	x^2	xy
061/062	25,305.08	-2	4	(50,610.16)
062/063	26,451.75	-1	1	(26,451.75)
063/064	28,255.07	0	0	0
064/065	32,324.21	1	1	32,324.21
065/066	34,580.33	2	4	69,160.66
Total	**146,916.44**	**0**	**10**	**24,422.96**

Source: Annual Financial Report of ADBNL

N=5 $\sum x^2 = 10$

$\sum y=146,916.44$ $\sum xy=24,422.96$

Since, $\sum x=0$

Let the straight line trend equation between Y and X be given by;

$$Y = a+bx \text{ .... (i)}$$

$$a = \frac{\sum Y}{N} = \frac{146{,}916.44}{5} = 29{,}383.29$$

$$b = \frac{\sum XY}{\sum X^2} = \frac{24{,}422.96}{10} = 2{,}442.30$$

Substituting the value of 'a' and 'b', the value of trend line is y=29,383.29+2,442.30x.

For Trend Values,

(Rs. in Million)

Year	x=(X-063/064)	a	b	Y=a+bx
061/062	-2	29,383.29	2,442.30	24,508.70
062/063	-1	29,383.29	2,442.30	26,951.00
063/064	0	29,383.29	2,442.30	29,393.29
064/065	1	29,383.29	2,442.30	31,835.59
065/066	2	29,383.29	2,442.30	34,277.89
066/067	3	29,383.29	2,442.30	36,720.19
067/068	4	29,383.29	2,442.30	39,162.49
068/069	5	29,383.29	2,442.30	41,604.79
069/070	6	29,383.29	2,442.30	44,047.09
070/071	7	29,383.29	2,442.30	46,489.39