CHAPTER-ONE

INTRODUCTION

1.1. Background of the Study

Within a short period of last 2 decades, the Nepalese financial system has grown significantly both in terms of business volume and the size of the market. A number of financial institutions with varied nature of operations came into existence offering a wide range of financial services. Since the second half of the 1980s, significant achievements have been made in the Nepalese financial system. Broadly, Nepalese financial sector can be divided into two parts, namely the banking system and the non-bank financial system. The banking system comprises Nepal Rastra Bank and all Commercial Banks while, the non-bank financial system consists of the Development Banks, Finance Companies, Rural Micro Finance Development Banks (licensed by NRB), Saving and Credit Cooperative Societies with limited banking activities (licensed by NRB) and Non-Government Organizations with limited banking activities (licensed by NRB). Moreover, Employees Provident Fund, Nepal Stock Exchange Limited, Insurances Companies, Deposit Insurance and Credit Guarantee Corporation, Credit Information Center Limited, Citizen Investment Trust and Postal Saving Offices are also categorized under the non-bank financial system but do not come under the jurisdiction of central bank for their regulation and supervision.

As of Mid July 2007, the number of Commercial Banks have reached 20, where as there are 38 Development Banks, 74 Finance Companies, 12 Rural Micro Finance Development Banks, 17 Saving and Credit Cooperative Societies, 47 Non-Government Organizations, 22 Insurance Companies, 116 Postal Saving Offices, and each one of Employees Provident Fund, Nepal Stock Exchange Limited, Citizen Investment Trust, Deposit Insurance and Credit Guarantee Corporation and Credit Information Center Limited in the non-bank financial system. (Source: Banking and Financial Statistics No.49, Mid-July 2007, Nepal Rastra Bank, Banks & Financial Institution Regulation Department, Kathmandu, Nepal)

Within non-bank financial system, Development Banks are establishing since 1960's. They were established by special Acts. After the enactment of Development Bank Act, 1996 there has been tremendous growth in the number of Development Banks in Nepal. After the Commercial Banks, the Development Banks are the 2nd largest group of deposit taking

financial institutions in Nepal. Out of 38 Development Banks, 8 are operating in Kathmandu valley and rest others 30 are rendering their services outside the valley. Among them, NIDC was the first Development Bank in Nepal, which came into operation in 1960.

Particularly, Development Banks are financing in the infrastructure development such is long-term investment in the field of agriculture, industry and other infrastructure. Although, the Development Banks were incorporated as public limited companies, but they are operated under the umbrella act, called Banks and Financial Institutions Act, 2006. The newly enacted umbrella Act has explored a wider horizon to all of the non-bank financial institutions, including Development Banks, to convert them as a commercial bank in the future according to the policy consideration under the provision made in the Banks and Financial Institutions Act, 2006.

The ratio of the total assets of the Development Banks with gross domestic products (GDP) is increasing tremendously beginning from its inception upto now. Similarly, the percentage share of the deposits and lending of Development Banks in the whole financial system showed the same trend. Thus, the contribution of Development Banks in whole financial system as well as in Nepalese Economy cannot be denied.

In this regard, the present study has been attempted to dig out the present status of the Development Banks in Nepalese economy.

1.2. Statement of Problem

Although, the number of financial institutions including Development Banks have increased rapidly; with the introduction of liberalized economic policy after 1990's. The coverage of Development Banks has not spread throughout the nation uniformly. Most of them centered in limited and facilitated urban areas like Kathmandu Valley and other major cities. The increase in the number of Development Banks causes the increase of its share in the whole financial system and consequently the contribution in the economic development of the country through mobilization of funds and utilization of its funds to increase the aggregate demand in the economy. Based in this statement, this study is focused on the following research questions:

■ Does the growth in the number of Development Banks contribute to increase in the total assets of the whole financial system?

♣ Is there any relationship between growth of Development Banks and economic development in Nepalese economy?

1.3. Objectives of the Study

The general objective of the study is to examine the role of Development Banks in the entire financial system of Nepalese economy. Based on the above general objective the following are the specific objectives of this study:

- ♣ To assess the role of Development Banks in resource mobilization and utilization.
- To examine the pattern of contribution of credit with the total sources of funds and number of financial institutions i.e. Development Banks.
- To examine the pattern of contribution of credit flow from the Development Banks (C) upon gross domestic product (Y).

1.4. Significance of the Study

The emergence of the Development Banks in the field of banking service industry in Nepal is playing a significant role. It has also contributed in the Nepalese economy gradually. Due to the lack of time series data during a short span of time, limited study has been made in this regard. Hence, the role of the Development Banks in the Nepalese economy should be assessed with the help of using certain statistical tools with quantifiable variables as well as the descriptive analysis. It is expected that the findings and recommendations of this study will be useful for the policy makers and for further studies also. Probably, this study is a first in kind with respect to assessing the economic contribution of Development Banks in economic development of Nepalese economy.

1.5. Hypothesis of the Study

The following are the hypothesis set out to test the regression results in this study:

- Total sources of funds of the Development Banks and number of Development Banks positively affect credit level of Development Banks.
- Credit from the Development Banks contributes the growth in the GDP.

1.6. Limitations of the Study

- Like This study has attempted to cover most of the activities of the Development Banks.
- ♣ This study has covered 14 years period ranging from 1993 to 2006 that helps to conduct empirical analysis. Regarding the descriptive analysis the data are somewhat different as per its availability.
- The study is based on secondary source of data.

1.7. Plan of the Study

This thesis is broadly divided into five different Chapters, viz., Introduction, review of literature, research methodology, analysis and interpretation of data and summary, conclusion and recommendation.

The first chapter deals with the background of the study, statement of the problem, objectives of the study, significance, hypothesis and the limitations of the study.

The second chapter includes the review of the literature both theoretical as well as empirical ones. Specifically, the review of the present situation of Development Banks in Nepal has been presented covering the legal framework for incorporation, functions, minimum capital requirement, and the regulatory framework for the Development Banks.

The third chapter devoted to the research methods employed in this study. It describes the conceptual framework, research design, nature of data, population and the sampling of the study, data collection procedure, data processing and analysis technique.

The fifth chapter includes the summary; conclusions and recommendations on the basis of research findings thereby present some suggestions for policy measures.

In addition, appendices and bibliography have also included in the concluding part of the thesis.

CHAPTER-TWO

REVIEW OF LITERATURE

2.1 Theoretical Review of Literature

A deep and efficient financial system can robustly contribute to sustained economic growth and lower poverty (Beck, Levine and Loyaza: 2000). The role of financial system is considered to be the key to economic growth. A well-developed financial system promotes investment by identifying and financing lucrative business opportunities, mobilizing savings, efficiently allocating resources, helping diversify risks and facilitating the exchange of goods and services.

The existence of banks and other non-bank financial institutions in a formal and organized way is collectively known as the financial system of a country. Financial institutions help to mobilize savings by issuing liabilities in form of different types of financial instruments. People and organizations wanting to borrow money are brought together with those having surplus funds in the financial market.

Transfers of capital between savers and those who need financial resources take place in different ways: direct and indirect transfer, through investment banker and indirect transfer through financial intermediaries. Banks and financial institutions are also considered as financial intermediaries. They provide financial intermediations through indirect transfer of financial resources between the deficit sectors and surplus sectors in the economy. The process of financial intermediation can be presented in the figure in the following way:

Figure: 1

The Process of Financial Intermediation (Paudel, NP: 2005)



Source: Paudel, N.P. (2005), "**Financial System and Economic Development**", for Nepal Rastra Bank in Fifty Years, Nepal Rastra Bank, Kathmandu

Financial system plays vital role in meeting financial needs of productive units through generating saving from the surplus-generating units of the economy. A formal financial intermediary can be more efficient in allocating financial resources in productive ways. It is, therefore, argued that an effective and efficient financial system is more important for the nation's economic development process.

Encouraging competition within the system, developing a strong and transparent institutional and legal framework for financial system services, establishing a prudent regulatory and supervisory mechanism and ensuring strong creditor rights and contract enforcement are some of the key factors that lead to build-up a sound financial system in the country. Therefore, it is argued that countries should adopt appropriate macroeconomic policies, which are crucial for the growth and development of the financial system.

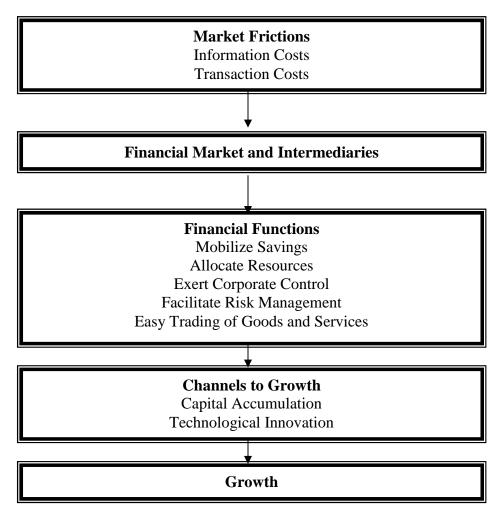
Economists and financial experts have generally reached a consensus on the central role of financial system in economic development. The theoretical argument is that policies to develop the financial system are expected to raise economic growth and, therefore, more developed countries have more developed financial systems.

It is generally agreed that the development of financial system is a critical path of the growth process and it is also a good predictor of future growth. Financial structure, the mix of financial instruments markets and institutions, arises to mitigate the effects of information and transaction costs and thereby increases saving mobilization rates. In organizing the functions of financial system, Levine summarizes the primary functions into five broad areas: to facilitate the trading, hedging, diversifying and pooling of risk; to

allocate resources; to monitor managers and exert corporate controls; to mobilize savings; and to facilitate the exchange of goods and services. He proposes the following theoretical approach to finance and growth:

Figure: 2

The Approach to Finance and Growth



Source: Levine, Ross (1997); "Financial Growth and Economic Development: Views and Agenda", for Journal of Economic Literature 35(2), pp 688-726 Pittsburg, USA.

The figure sketched above shows that the emergence of financial markets arises due to the costs involved in acquiring information and making transactions. Different types and combinations of information and transaction costs are ameliorated by financial system.

A particular friction motivates the need of distinct financial contract, market or institution. Financial institutions and intermediaries perform certain financial functions,

which ultimately affect economic growth through two different channels. In the capital accumulation channel, the financial system affects capital formation either by altering saving rates or by reallocating savings among different capital producing technologies.

Technological innovation, the second class of growth channel, Caprio and Honohan focus on the invention of new production processes in which financial system affects growth by altering the rate of technological innovation. Therefore, a particular market friction in the economy is the starting point that drives the need for a financial system. The financial system comprising of financial institutions and intermediaries performs certain financial functions to have desired affects on savings and allocation decisions and such decisions influence economic growth through different channels.

Broad and deep financial markets facilitate savings mobilization by offering both individual and institutional savers and investors' additional instruments and channels for placement of their funds at more attractive returns than are available on bank deposits. At the same time, the competition also makes such access more affordable. Developed financial markets also have the capacity to reduce volatility, distortions and risk by operating in an environment that is transparent, competitive, and characterized by the presence of a diverse array of products and services, including derivative instruments that allow for effective risk management.

Hence, reforms in a country's financial architecture often lay the groundwork for improved economic performance. In almost all advanced economies, financial system delivers a broad range of financial services and sophisticated products, and the efficiency of such well-developed systems has contributed to macro economic stability and sustained economic growth and prosperity. Increased availability of funding and more efficient allocation of capital for productive private sector investment is beneficial economy-wide, with particular benefits for small and medium sized enterprises that are often constrained in their financing options prior to effective banking reforms and non-bank financial sector development. According to recent analysis, growth in private credit volumes and equity market capitalization as a percent of GDP has consistently been correlated with growth in per-capita income. Thus, robust growth and effective functioning of a full service financial system is essential for economic development and prosperity (Caprio and Honahon, 2001).

An efficient financial system is one of the foundations for building sustained economic growth and an open, contestable economic system. At its best finance works quietly in the background, but when things go wrong, financial failures are painfully visible. Both success and failure have their origins largely in the policy environment (World Bank: 2005).

2.2 Empirical Review of Literature

website http://en.wikipedia.org/wiki/International Having gone through the financial_institution and its other links, the history of development bank had been started after the end of Second World War. Due to Second World War the economy of the country, which is, involving in the war became worse. To overcome the problem of economic crisis international community tried to establish the development bank. As a result International Bank for Restructuring and Development (IBRD) later known as World Bank, International Monetary Fund (IMF) etc. were established. Similarly, Inter-American Development Bank, African Development Bank, Business Development Bank of Canada, Asian Development Bank, East African Development Bank, Community Development Bank, Caribbean Development Bank Multilateral Development and Islamic Development Bank etc. are the example of other development bank in the world.

Source: http://en.wikipedia.org/wiki/International_financial_institution

Our concern is not the study of such above-mentioned International Development Bank as well as microcredit development banks of Nepal. Now, altogether there are 58 development banks in Nepal which is licensed under the Bank and Financial Institutions Act (BAFIA) 2006. This study is concerned to the macroeconomic indicator of these 58 development banks only depending upon the data made available.

In 1957, an industrial development center was established to carry out industrial research and development functions. In 1959 (by way of a Special Charter Act.), the center was converted to Nepal Industrial Development Corporation to provide financial and technical assistance to industries in the private sector. To further enhance the level of activities of the Corporation, the 1957 Special Charter has been repealed and a new NIDC Act. 1989 enacted. The amended NIDC Act has empowered NIDC to carry out other several functions such as merchant banking & leasing business, underwriting

services and commercial banking facilities. Now This NIDC is working under the Umbrella Act (Bank and Financial institution Act, 2006).

Source: (http://www.nidc.org.np/indexpage.htm).

With the main objective of providing institutional credit for enhancing the production and productivity of the agricultural sector in the country, the Agricultural Development Bank, Nepal was established in 1968 under the ADBN Act 1967, as successor to the cooperative 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.

Agricultural 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 a 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 operations since 1984.

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. Source: http://adbl.gov.np/introduction.html#intro

Before the enactment of the Development Banks Act in 1996, ten commercial banks, two development banks, Credit Guarantee Corporation (CGC), Employee's Provident Fund (EPF) and some insurance companies, most of them under public ownership were in operation in Nepal. These financial institutions are specialized in the sense that they serve their own clientele. Credit needs of small consumers and the demand for the capital market facilities remained unmet.

In this backdrop, the Development Bank Act was enacted mainly to serve small and medium entrepreneur/borrowers and to meet the demand for agriculture and the industrial credit as well. In the process, a link between and industrial production is established. Besides rendering fee-based services, Development Banks extend credit to individuals through hire purchase and lease finance. Credit extended for agricultural and industrial production is expected to boost domestic production and thereby generate additional income and employment. It was deemed that Development Bank would enhance economic activities.

The existing legal framework for the incorporation and operations of Development Bank in Nepal, functions which can be carried out by the Development Banks in Nepal, minimum paid-up capital requirement to incorporate a development bank in Nepal and major Highlights on the Prudential Norms namely Unified Directives issued for Banks and Financial Institutions including the Development Banks in Nepal are explained in brief in the appendix herewith.

After analyzing above literature, it is concluded that the financial system, i.e., financial institutions, financial instruments and the financial market has pivotal role in economic development of every economy. No economy can exist without the existence of financial system. Institutional arrangement of every financial system can be grouped into banking and non-banking financial institutions. The banking system is made up of commercial banks and investment banks. Commercial banks are primarily in the business of accepting deposits and extending credits. The non-banking financial institutions comprise of development banks, finance companies, saving and credit unions, building societies, discount houses, leasing companies, mortgaged companies, insurance companies, pension funds and provident funds. Few of these non-bank financial institutions are also engaged in the business of accepting deposits from the general public. However, the central authority can impose certain restrictions on accepting deposits by these institutions. Only commercial banks are authorized to conduct full-fledged banking services. From the above review of literature, we did not find any specific study which has been made to assess the role of development banks in Nepalese context, hence, the present study focuses to assess the role of development banks in the Nepalese economy, which is increasing in their quantitative existence.

Chapter-Three

RESEARCH METHODOLOGY

3.1 Conceptual Framework

Conceptually speaking, development banks are the non-bank financial institutions operating in the overall financial system of the economy. In practice, however, they serve as they act as the borrowing and lending financial institutions with additional financial risk taking management. So depending upon a wide variety of development banks, they are solely and wholly deposit taking institutions to disburse loans to the prospective clients. They are again considered to the most diverse non-deposit taking financial institutions that tends to meet various kinds of specialized credit needs. In course of time, they are often developing as specialized financial institutions to meet specific credit needs like leasing, project financing, housing and other financing. Then as distinct from a number of other financial institutions, development banks were known to serve as the architects or engineers of financial risk management. Lastly, development banks began to act as the development banker in having greater stake in the financial intermediary networks in the nations' financial system.

Economic development in any country is the hallmark of the financial system. Institutions and markets are in continual state of flux since monetary and credit conditions change over time. And to be more specific, the non-bank financial institutions such as savings and loan association, mutual savings banks, credit unions, insurance companies, investment companies, provident fund etc. are playing a more significant role in the transmission mechanism of macro financial economic policy to various sectors of the economy and to GNP through the process of financial intermediation. In this regard, development banks have been an integral part of non-bank financial institutions. They are one of the largest and most diverse non-depository financial institutions. In the case of Nepal, development banks are also allowed to collect even current deposits from general public with some conditionality as prescribed by central bank, i.e., Nepal Rastra Bank. The growth of development banks, during last decades shows overwhelming trends and it has increased its share in the total assets of the financial system.

3.2 Research Design

The present study has been divided into both the quantitative and qualitative analysis. The quantitative research design has been based on the regression analysis. The relation between the finance and the economic development has also been measured through the quantitative analysis. Similarly, the qualitative research design has also been made on the basis of the descriptive inferential analysis. Various qualitative inferences are derived from the descriptive analysis. It basically focuses the status in different segments of the whole financial system and the status of the development banks in Nepalese perspective.

3.3 Nature and Sources of Data

The data for this study has been taken from the secondary sources, thus the nature of the data is secondary one. Mostly the data have been taken from the publications made by Nepal Rastra Bank and Ministry of Finance, the Government of Nepal. The main source of data for the study are Economic Surveys, published by the Ministry of Finance, Government of Nepal, Quarterly Economic Bulletin and the Banking and Financial Statistics published by Nepal Rastra Bank and other relevant sources. Throughout this study since we have used the annual data, i.e. fiscal year ended as of mid-July each year and necessary adjustments in the data have been made to evolve continuous and comparable series.

3.4 Population and the Sampling of the Study

Population of this study is the whole financial system of Nepalese Economy. Development banks are also the player of the financial system; hence development banks are selected as sample for this study. This study is primarily related with the macroeconomic variables; like the nominal GDP, total assets/liabilities, deposit and credit of the development banks.

The sample period has been chosen from 1993 to 2006 and the frequency of data is annual. So, there are total 14 observations in the sample. The year mentioned in this study has basically stood on mid-July each year. Nominal GDP at producer's price, total assets, credit and the number of development banks are variables under this study.

3.5 Data Processing Method

To provide reasonable estimates as far as possible, in the present study, we have used 'log-linear' technique of data processing. The technique allows us to change absolute level

figures into log version. Here, we have chosen natural logarithm, which has a base of e (2.718).

The estimated regression coefficients in terms of log linear form are known as elasticity coefficients, which are generally considered as better estimators in relative to slope coefficients in absolute level version. Moreover, the data are relatively more smoothed when we take them into log-linear version than in absolute level version.

3.6 Variables and Operational Definitions

It has been evident that financial system supports to the economic growth of any country. The increasing trend of the non-bank financial institutions focusing development banks can also contribute to channelize the financial resources in the productive sector as well as business sector has greater influence in the pace of economic development of each country. In this study based on the literature review, the following variables have been used.

3.6.1 Dependent Variables

Like banks and other non-bank financial institutions, development banks also mobilizes its financial resources from the surplus sectors in the economy in the form of deposits, borrowing and debenture as well capital and utilizes it to the deficit sectors for productive and business uses.

Development banks in Nepal are quite different from other countries. Development banks are not solely non-depository financial institution in Nepal; rather they can mobilize even current deposit with respect to their core capital, under Nepal Rastra Bank Directives.

To play vital role in the economic development, development banks provide loans and advances for productive use and to operate different business. Consumer loans also increases aggregate demand in the economy and consequently production and business operations.

To make loans and advances by the development bank, it has to mobilize deposits from public, borrowing and debenture issue as well. Therefore, depending upon the model specification for regression analysis; total loans and advances made by the development banks is total credit (C) and the nominal gross domestic products in producer's price (Y) are considered as the dependent variables in this study.

3.6.2 Independent Variables

The variable, which influences the other variable, is called independent variable. The independent variable is also known as the explanatory variable. The following are the independent variables in this study:

a. Total sources of Funds or total assets (A)

The Total sources of funds i.e. total liabilities/assets constitute the capital fund, deposits, borrowings, debentures and other liabilities of the development banks. From accounting point of view, it is always equivalent to the total assets of the development banks. The loans and advances by development banks can be made from the funds available with them.

b. Number of development Banks (Dn)

The network of the development banks are most essential for mobilize funds make available to lend to the deficit sector of the economy and equally important to lending activities of the development banks. Therefore, the numbers of development banks are also taken as an independent variable on which the credit by development banks depends.

c. Credit or the Loans and Advances (C)

The total credit made by the development banks (C) is also considered as an independent variable. Making loans and advances by the development bank, refers to the utilization of financial resources scattered in the economy, which can be canalize in the productive sector as well as in business and consumer loan. It also increases aggregate demand in the economy, through its multiplier effect cause in the growth of gross domestic product, i.e.; economic development in this study.

3.6.3 Intermittent Variable

Credit made by the development bank (C) has been taken both as dependent and independent variable. While regressing with the number of development banks and total sources of fund i.e. total assets it is dependent variable whereas regressing with GDP it is independent variable, mainly due to finance cause an effect in economic development. Hence, the credit made by the development banks (C) is an intermittent variable in this study.

3.7 Data Analysis Techniques

In this study statistical data have been regressed in the log linear functional form. The statistical data have been tested in the computer by using the Microsoft Excel and E-Views software and the results drawn from the regression analysis have interpreted in this study. Both descriptive and empirical methods have been used to analyze the results and data in this study. In this research work, the qualitative method is used for the analysis of time series data. Based on the actual data, the analysis has been done with the help of percentage, average, ratio and graph charts etc. The quantitative method has been used to know the impact of independent variable in the dependent variable. The followings are the data analysis techniques used in this study:

3.7.1 Estimation Procedure

It has been used the single equation estimation method thereby implicitly assuming that the independent variables are exogenously determined in the sense of being independent of the error term in the equations. The results were obtained with ordinary least square method while regression equations as mentioned in the model specification above.

3.7.2 Model Specification

For the purpose of this study, using only the natural log-linear form as it allows us to test some of the important hypothesis easily. Also as there is no "a-priori" reason for choosing any of these forms, the best way to find out the most appropriate choice of functional form is to use a likelihood ratio suggested by A.E.P.Box and D.R.Cox (1964) using which Paul Zaremka (1968) found the natural log-linear form to be the most appropriate and also used by R.K.Sampath and Zakir Hussain in their study (1980). Our preliminary analysis also conformed the same.

While making regression analysis in this study, two different regression equations are taken as model specification based on the hypothesis set out in this study.

Total credit made by the development banks (C) is the function of total sources of funds of development banks (A) and the number of development banks (Dn). Symbolically,

$$C = f(A, Dn)$$

Where,

C = Total credit or loans and advances made by the development banks.

A = Total sources of fund or total assets of the development banks.

Dn = Total number of development banks.

While estimating the credit function, the variables used in the functions are calculated in the natural logarithmic form. Symbolically, the estimating equation in natural log form is:

$$\ln C = b_0 + b_1 \ln A + b_2 \ln Dn + U_t - b_1 \text{ and } b_2 > 0$$

Where,

ln = natural log

 b_0, b_1, b_2 = Coefficients of regression parameters including the intercept term.

 $u_{t} = \text{Error term.}$

Similarly, the gross domestic product (Y) is the function of credit made by development banks (C). Symbolically,

$$Y = f(C)$$

Where,

Y = Nominal gross domestic product in producer's price

C = Total credit or loans and advances by the development banks.

While estimating the credit function, the variables used in the functions are calculated in the natural logarithmic form. Symbolically, the estimating equation in natural log form is:

$$\ln Y = b_0 + b_1 \ln C + U_t = b_1 > 0$$

Where,

ln = natural log

 $\boldsymbol{b}_{\,0}$, $\boldsymbol{b}_{\,1}$ = coefficients of regression parameters including the intercept term.

 $u_{\star} = \text{Error term.}$

3.7.3 Coefficient of Determination

Coefficient of determination, R², is a statistical number, computed from the sample data, which exhibits the percentage of the total variation of the dependent variable being explained by the changes on the independent variables. The coefficient of determination is calculated in order to test the explanatory power of the model. The coefficient of determination is calculated in terms of the following formula:

$$R^2 = 1 - \frac{\sum e_t^2}{\sum (Y_t - Y)^2}$$

Where,

$$e = Y_t - \hat{Y_t}$$

When the coefficient of determination is adjusted to the degrees of freedom, the adjusted coefficient of determination, R^2 , is computed and the formula is:

$$\overline{R}^2 = 1 - \frac{\sum e_t^2 / (N - K)}{\sum (Y_t - Y)^2 / (N - 1)} = 1 - (1 - R^2) \frac{(N - 1)}{(N - K)}$$

Where,

N = Number of observations

K = Number of parameters.

3.7.4 t-Test

The t-test used to find out the statistical significance of the individual parameters at the given level of statistical significance. It determines the degree of confidence in the validity of the estimates. This test helps us to decide whether the estimated parameters b_1 , b_2 , b_3 etc is significantly different from zero or not, t-test is performed as follows:

Null Hypothesis: H_0 : \hat{b} , i.e. the regression parameter is not significant.

Alternative Hypothesis, $H_1: b_1 \neq 0$ i.e. the regression parameter is significant.

T-test statistic is computed by the formula,

$$t = \frac{\hat{b}}{SE \quad (\hat{b})}$$

Where,

$$SE(b) = \sqrt{\frac{\uparrow_{u}^{\Lambda}}{\Sigma(X - X)^{2}}}$$
 and $\uparrow_{u}^{\Lambda} = \frac{\Sigma e^{2}}{N - K}$

Here, \int_{u}^{Λ} is an unbiased estimator of true \int_{u}^{2} .

When computed t-statistic is greater than tabulated t-statistic at a certain degree of freedom and level of significance, the null hypothesis is rejected and the regression parameters are significant and vice versa.

3.7.5 F-Test

F-test is used to test the overall significance of the regression model at a given level of statistical significance. It attempts to show whether the movement in the dependent variable is significantly explained or not with the change in independent variables. F-test statistic is computed as follows:

Null Hypothesis: H_0 : all b^{1s} are zero, i.e. no linear relationship exists between dependent and explanatory variables.

Alternative Hypothesis: H_1 : all b^{is} are not equal to zero, i.e. there exists linear relationship between dependent and explanatory variables.

The F-test statistic is computed by the formula,

$$F = \frac{R^{2}(K-1)}{(1-R^{2})(N-K)}$$

Where,

 R^2 = Coefficient of determination.

K = Number of Estimated Parameters.

N = Number of observations.

When computed F-statistic is greater than tabulated F-statistic at a certain degree of freedom and level of significance, the null hypothesis is rejected and we can conclude that there is significant linear relationship between dependent variable and the explanatory variables and vice versa.

3.7.6 Instruments Used

The simple calculations like ratio, percentage, etc. are made with the help of ordinary calculator. The Microsoft Excel program is used to estimate simple and multiple regression equations. This program also serves us to do various statistical tests as well.

Chapter-Four

PRESENTATION AND ANALYSIS OF DATA

4.1 Descriptive Analysis

The descriptive analysis has been broadly divided into three segments. First, the financial sector development in Nepal; second, performance of Nepalese financial system and the third segment deal with the performance of development banks in Nepal.

4.1.1 Financial Sector Development in Nepal

The incorporation of the Nepal Bank Limited (NBL) in 1937 was the turning point of modern and organized financial system in Nepal. It was established under the Nepal Bank Limited Act, 1937. Prior to this, the Tejarath Adda, which was established in 1880, used to disburse credit to the people. It used to render commercial banking services; such as the acceptance of deposits, delivery of credit facilities and other commercial banking services at that time.

Nepal Bank Limited was the first financial institution established in Nepal. Nepal Bank

Limited remained only one financial institution in Nepal until Nepal Rastra Bank, the central bank of Nepal was established in 1956 under the Nepal Rastra Bank Act, 1955 and the Act was later replaced by Nepal Rastra Bank Act, 2002. Till 1956 there were 12 branches of Nepal Bank Limited providing banking services in few urban areas of the country.

Then the second commercial bank, Rastriya Banijya Bank was established in 1966 as per the Rastriya Banijya Bank Act, 1966 under the sole ownership of the Government of Nepal. The main objective of establishing this second commercial bank was to augment the banking services to the growing economy. Other than commercial banking services to the Government, it also helped in magnetizing the economy.

The Nepalese financial sector is composed of banking sector and non-banking sector. Banking sector comprises Nepal Rastra Bank (NRB) and non-banking sector commercial banks. The includes development banks, micro-credit development banks, finance companies, cofinancial institutions. operative nongovernmental organizations (NGOs) performing limited banking activities, i.e. microfinancing services. Apart from these institutions, other financial institutions comprise of insurance companies, Employee's Provident Fund (EPF), and Citizen Investment Trust (CIT), Postal saving offices and Nepal Stock Exchange (NEPSE) limited.

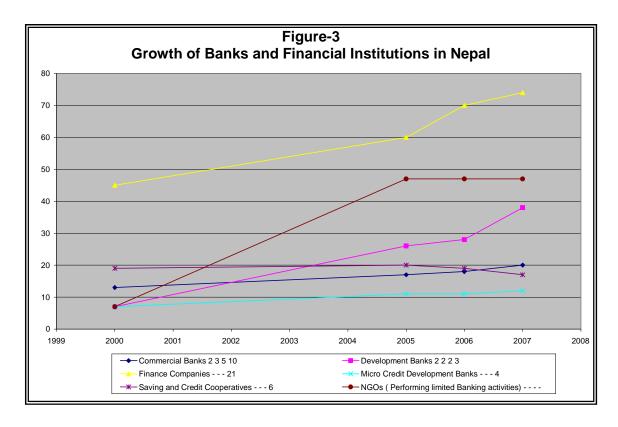
There is a tremendous growth in the number of financial institutions in Nepal in the last two decades. At the beginning of the 1980s when financial sector was not liberalized, there were only two commercial banks, and two development banks performing banking activities in Nepal. There were no micro-credit development banks, finance companies, cooperatives and NGOs with limited banking transactions. After the liberalization of the financial sector, financial sector has made a hallmark progress both in terms of the number and financial services.

Table-4.1: Growth of Banks and Financial Institutions

Types of Banks and Financial Institutions	Mid-July 1980	Mid-July 1985	Mid-July 1990	Mid-July 1995	Mid-July 2000	Mid-July 2005	Mid-July 2006	Mid-July 2007
Commercial Banks	2	3	5	10	13	17	18	20
Development Banks	2	2	2	3	7	26	28	38
Finance Companies	-	-	-	21	45	60	70	74
Micro Credit Development Banks	-	-	-	4	7	11	11	12
Saving and Credit Cooperatives	-	-	-	6	19	20	19	17
NGOs (Performing limited Banking activities)	-	-	-	-	7	47	47	47
Total	4	6	7	44	98	181	193	208

Source: Nepal Rastra Bank

By mid-July 2007, the number of NRB licensed bank and non-bank financial institutions totaled 208. Out of them, 20 are commercial banks, 38 development banks, 74 finance companies, 12 micro-credit development banks, 17 saving and credit co-operatives, and 47 NGOs.



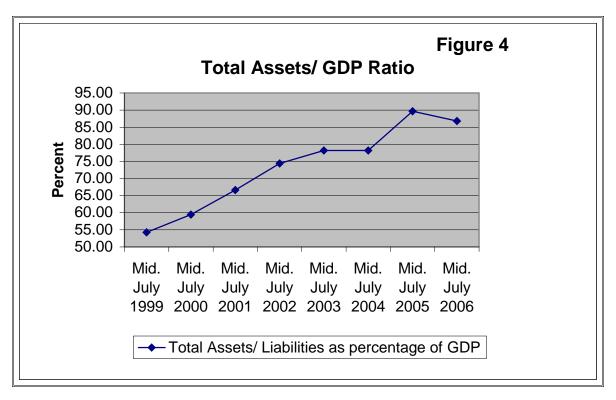
Source: Table 4.1

4.1.2 Performance of Nepalese Financial System

4.1.2.1 Total Assets (=Total Liabilities)/GDP Ratio

The total assets/liabilities of the financial system witnessed continuous growth over the last six years signifying strong uplift in the financial business. It increased persistently at an average rate of 12.47 percent per annum during 2000 to

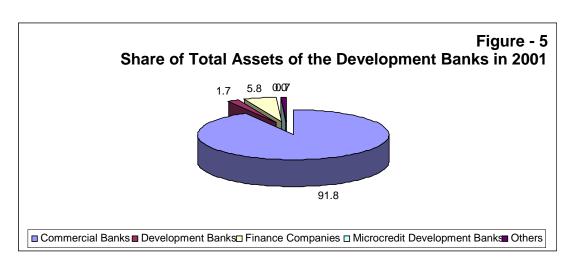
2006 and reached to Rs. 506.13 billion in mid-July 2006 from Rs. 225.55 billion in mid-July 2000. The total assets/liabilities in mid-July 2006 are 6.70 percent higher than that of mid-July 2005. The ratio of the total assets/liabilities of the financial system to GDP at current prices is slightly decreased to 86.82 percent in mid-July 2006 from 89.66 percent in mid-July 2005. The same ratio was 59.44 percent in mid-July 2000.

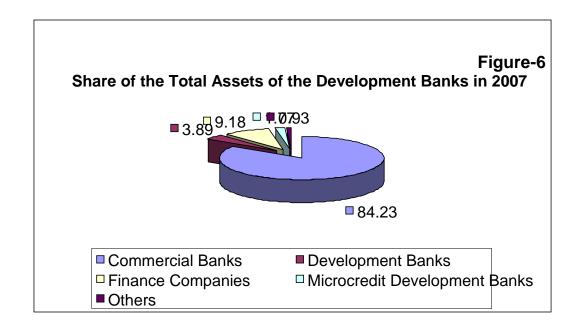


Source: Nepal Rastra Bank (2006a), Banking and Financial Statistics, No. 47, Kathmandu

4.1.2.2 Market Share of Total Assets/Liabilities

Although, the size of the total assets increased significantly, the market share of banks and nonfinancial institutions did bank not change drastically. Commercial banks alone still held the position dominant in financial system. Commercial banks accounted 84.23 percent share in total assets/liabilities of the financial system in mid-July 2007. Commercial banks and development banks altogether held percent of total assets/liabilities of the financial Only 3.89 percent of the system. total assets/liabilities were owned by development banks in mid-July 2007.





The market share of assets of commercial banks, development banks, finance companies and micro credit development banks and others were 84.23 percent, 3.89 percent, 9.18 percent and 1.77 percent and 0.93 percent respectively in mid-July 2007.

Source: Nepal Rastra Bank (2006a), Banking and Financial Statistics, No. 47, Kathmandu

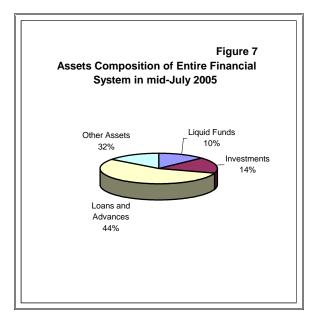
4.1.2.3 Composition of Liabilities of Entire Financial System

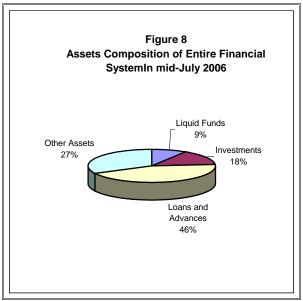
No fundamental change in the total liabilities/assets structure of the entire financial system was observed over the six years. Deposits continued to acquire 60 percent or so share in total liabilities over the last five years. Other components of total liabilities also did not significantly change. In mid-July 2006 the capital fund as percentage of total

liabilities was –1.47 percent, Borrowings 4.31 percent, Deposits 64.80 percent and other liabilities 32.36 percent.

4.1.2.4 Composition of Assets of the Entire Financial System

On assets side, the composition of total assets was slightly changed over the last six years. Liquid funds as percentage of total assets continuously declined where as investments and other assets as percent of total assets grew over the years and loans and advances as percentage of total assets remained at 45 percent or so over the last five and half years. In mid-July 2005, loan and advances held 44.07 percent share in total assets, followed by other assets 32.25 percent, investments 14.02 percent and liquid funds 9.65 percent.





Similarly, in mid-July 2006, loan and advances accounted 45.54 percent share in total assets, other assets 27.45 percent, investments 17.58 percent and liquid funds 9.43 percent.

Source: Nepal Rastra Bank (2006a), Banking and Financial Statistics, No. 47, Kathmandu

4.1.2.5 Market share in Deposits, Loans and Advances, Borrowings, Liquid Funds

and Investment, i.e., Major Balance Sheet Indicators.

Commercial banks held dominate share on the major balance sheet components of financial system. Of the total deposits of the system i.e. Rs. 327995.18 million in mid-July 2006, the share of commercial banks was 88.80 percent followed by finance companies 8.34 percent, development banks 1.80 percent, and micro credit development banks 0.28 percent and credit cooperatives and NGOs 0.78 percent.

Similarly, out of total loans and advances Rs. 230590.04 million in mid-July2006, the share of commercial banks stood at 76.71 percent, finance companies at 11.75 percent, development banks at 8.76 percent and other financial institutions at 2.78 percent. The share of commercial banks in borrowings, liquid funds and investments of whole financial system remained at 43.61 percent, 81.37 percent and 92.37 percent respectively in mid-July 2006.

The major balance-sheet indicators showed a divergent trend during 2000-05. Capital funds, which recorded an average growth rate of 32.11 percent during 2000-03, turned to be negative in mid-July 2005. Deposits, investments, and loans and advances witnessed strong growth during 2000-05. Deposits grew at an average rate of 15.86 percent per annum, investments at 27.82 percent, and loans and advances at 14.33 percent during 2000-05. Growth rates of borrowings, investments and loans and advances remained lower in 2006 than that of 2005.

Table-4.2: Growth of Major Balance-Sheet Indicators (in percent)

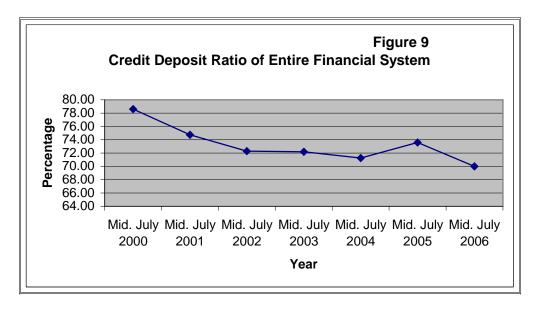
Particular	Year ending mid-July									
	2000	2001	2002	2003	2004	2005	2006			
Capital Fund	13.27	26.56	43.97	26.56	(92.63)	(516.43)	(8.38)			
Borrowings	-	-	-	-	12.46	23.77	(5.43)			
Deposits	24.24	21.95	23.59	11.51	13.12	9.81	9.60			
Liquid Funds	24.68	16.20	-5.90	-20.59	22.08	-14.32	6.26			
Investments	22.01	40.59	43.36	31.00	8.64	18.95	22.45			
Loans and Advances	18.72	15.94	19.54	11.35	11.67	13.38	5.07			

Source: Nepal Rastra Bank (2006a), Banking and Financial Statistics, No. 47, Kathmandu

Liquid funds showed a mixed trend during 2000-06. It increased in 2000, 2001 and 2004 but decreased in 2002, 2003, 2005 and 2006. On an average, it slowed down by an average rate of 1.91 percent per annum during the review period.

4.1.2.6 Credit/Deposit Ratio of the Entire financial system

The growth rate in deposit was higher than the growth rate of credit during 2000-2004 and in mid-July 2006, but credit growth rate superseded deposits growth rate in 2005. The outstanding deposit was much higher than the outstanding credit in mid-July 2006.



Source: Nepal Rastra Bank (2006a), Banking and Financial Statistics, No. 47, Kathmandu

Deposit stood at Rs. 327995.2 million and credit at Rs. 230509 million in mid-July 2006. Credit deposit ratio was observed decreasing with slight oscillation over the last six years. This ratio was 78.61 percent in mid-July 2000 which decreased and reached 70.00 percent in mid-July 2006.

To sum up, the performance of the financial system as a whole in Nepalese perspective showed a mixed trend. The total assets/GDP ratio is stable during last couple of years, whereas the market share of commercial banks showed decreasing trend but the same is increasing in the case of development bank, companies and the micro finance development banks, which refers that the outreach of the banking services by other bank and financial institutions is increasing compared to the commercial banks.

The credit/deposit ratio of the whole financial system showed decreasing trend last six years, which refers that the growth in the deposit is much more higher than the credit, on the other it showed that the alarming percentage of the non-performing loans of the financial system hindered the rampant increase in the lending

activities and also showed lack of demand for the productive financial resources for the investment purposes by the entrepreneur in the country due to the conflict situation during the study period.

4.1.3 Performance of Development Banks in Nepal

In conceptual term, development banks are non-bank financial institutions and they are one of the largest diverse non-depository financial institutions that have developed worldwide. Serving in the capacity of borrowing lending institutions, development banks have under taken a number of key financial functions in addition to the non-fund based activities. They are providing specialized functions and also a wide variety of other functions not provided by commercial banks.

Development banks are different from commercial banks and other financial institutions in terms of their orientation for management risk taking, lending policies and practices, size and potentiality, service delivery mechanism and efficiency. But development banks are facing many of the policy level structural issues, regulatory issues and institutional problems in its operations.

However, in Nepal, development banks are undertaking deposit taking function as one of their key finance function in addition to the growing volume of lending business in various sectors like hire purchase, housing, and term loan to business and industry and other lending arrangement for leasing and other fixed deposit and share certificate based loans.

The regulatory authorities especially Nepal Rastra Bank is monitored on the capital fund and liquid fund requirements of development banks through directives, guidelines, and pertinent circulars to maintain adequate capital base, change in cash reserve ratios and variety of control methods to pursue economic stabilization measures.

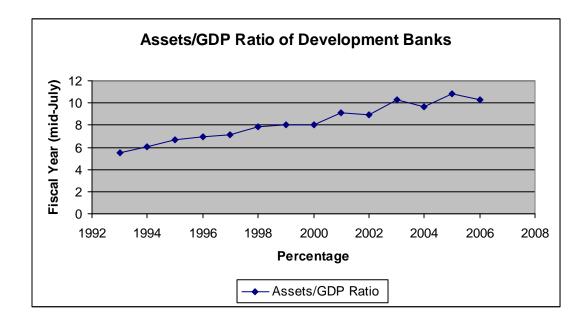
Starting from the late 1990s, development banks have been growing rapidly. The total number of development banks, reached 38 in mid-July 2007. However, majority of development banks being operated in the Kathmandu valley and the rest are operated outside the Kathmandu valley.

4.1.3.1 Total Assets/GDP Ratio of Development Banks in Nepal

The total asset/liabilities of the whole development banks witnessed fluctuating and significant growth over the last 12 years, signifying strong uplift in the financial business. It increased at an average rate of 8.24 percent

per annum during 1993 to 2006 and reached to Rs. 60.10 billion in mid-July 2006 from Rs. 9.42 billion in mid-July 1993.

The figure below shows the ratio between the total assets/liability of development banks to GDP:

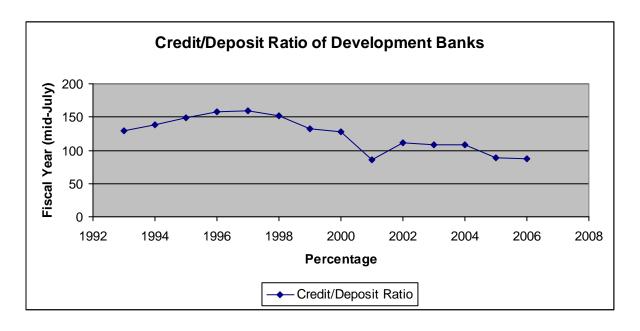


Source: Appendix-5

The trend shows that the contribution of development banks financial transaction in Nepalese economy is growing and contributing positively.

4.1.3.2 Credit/Deposit Ratio of Development Banks in Nepal

Credit/Deposit ratio of whole development banks decreased to 86.90 percent in mid-July 2006 from 128.80 percent in 1993. However, it did not have continuous decline during 1993 to 2006. It had dropped to 85.51 percent in mid-July 2001 and had increased to 111.66 percent in 2002. Similarly, decreased to 107.72 percent in 2003 and increased to 108.42 percent in mid-July 2004. The following figure shows the level of credit/deposit ratio of development banks during 1993 to 2006.



Source: Appendix-6

The credit/deposit ratio of development banks shows the trend of its focus to lending activities compared to the mobilization and fulfilling this resource gap from other sources of funds like borrowings.

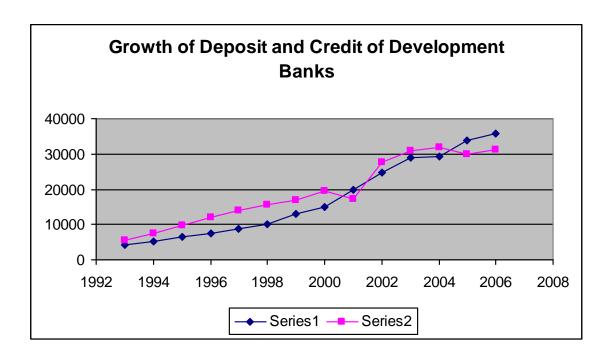
From the figure above and data regarding the C/D ratio, we can draw conclusion that development banks are contributing in the pace of economic development of our country through providing financial resources to the productive

sector in the form of loans and advances as a means of factors of production; i.e. capital.

4.1.3.3 Growth of Deposit and Credit of Development Banks in Nepal

The growth of deposits was slightly higher than the growth rates of credits during 1994 to 2006. The outstanding deposit was Rs. 4.23 billion in mid-July 1993 which increased and stood at Rs. 35.83 billion in mid-July 2006.

Similarly, the credit outstanding was Rs. 5.44 billion in mid-July 1993 and also increased to Rs. 31.14 billion in mid-July 2006. The figure given below shows the increasing trend of deposit and credit of development banks during the last one and half decades. Series 1 refers to the deposit whereas series 2 credit made by the development banks in Nepal.



Source: Appendix-7

To sum up the performance of development banks in Nepal, it showed some satisfactory results. The total assets/GDP ratio is increasing refers the contribution sharply of the development banks in Nepalese economy showed significant during the study period. Similarly, the credit/deposit ratio remaining around cent percent gives us the inference that banks are successful development utilizing its deposits wholly in the lending activities; which means that development banks are able to bear the cost of funds from the income generated through the income from loans and advances.

The contribution of development banks in Nepalese economy has been evident from its function mainly the lending activities. The loans and advances provided to the hire purchase and the housing create the indirect taxes to the government, on the other hand the term loans increases total output in the real sector directly contributes in the gross domestic product.

4.2 Analysis of Empirical Results

Despite the descriptive analysis, the present study has made an attempt to analyze the data empirically to assess the role of development banks to the economic development of Nepal. The empirical study is made with the help of regression analysis, to measure the causal, i.e. cause and effect relationship between the

dependent and independent variables. present empirical study is based on relationship between the credits of development banks (C) i.e., dependent variable and total sources of fund of development banks i.e. total liabilities/assets (A) and the number banks (Dn) as independent development variables. Similarly, another dependent variable is gross domestic product (Y) and the credit made by the development banks (C) as an independent variable.

There are two different regression equations used to analyze the data empirically. The calculation of regression result has been made with the help of Microsoft Excel program has been used. The regression equations as specified in the model specification are as follows:

$$\ln C = b_0 + b_1 \ln A + b_2 \ln(Dn) + U_t$$
(1)

$$\ln Y = b_0 + b_1 \ln C + U_t \qquad (2)$$

Where,

In = natural log

C = total credit by development banks

A = total sources of funds i.e. equivalent to total assets

Dn = number of development banks

Y = nominal gross domestic product in produce's price

 b_0, b_1, b_2 = Coefficients of regression parameters including the intercept term.

4.2.1 Regression results of the equation no. 1

$$\ln C = b_0 + b_1 \ln A + b_2 \ln(Dn) + U_t \qquad (1)$$

$$\ln C = -2.47 + 1.22 \ln A + 0.17 \ln(Dn)$$

$$(-1.77) \qquad (8.19) \qquad (2.07)$$

$$(R^2) = 0.9629$$

$$\overline{R^{2}} = 0.9562$$

$$F = 142.76$$

N = 14

Note: figures in the parenthesis are "t" statistic

In this model, three variables are used in which the credit (C) is dependent variable and the total assets (A) and the number of development banks (Dn) are independent variables, i.e. C = f(A, Dn).

The results of equation (1) reveal that the intercept term is seemed to be insignificant. If all independent variables are assumed to be zero, there will be negative credit supply. However, this may be due to the linear relationship with other variables.

In other words, the credit can only be made only after the existence of development banks and the sources of funds mobilized by the development banks. The regression coefficients of independent variables show that there is a positive relationship between the credit (C) with the total assets (A) and the number banks (Dn), which development a favorable result. The result shows that one percent change in the total assets (A) may result in 1.22 percent change in the total credit made by the development banks (C). Similarly, one percent change in the number of development banks may result in 0.17 percent change in the credit made by the development banks (C).

The value of coefficient of determination (R²) is higher in this model, which shows that the explanatory power of the equation is 96.29 percent that is 96.29 percent change in the credit (C) is explained by the total assets (A) and the number of development banks (Dn).

Similarly, the value of adjusted coefficient of determination ($\overline{R^2}$) is also very high in the model which shows that 95.62 percent of the total variations is explained by the fitted regression analysis. Thus, we can say that the total assets (A) and the number of development banks (Dn) can affect the volume of credit by development banks (C) significantly.

The calculated t-value of the regression coefficient of total assets (b_1) is greater than its tabulated value [$t_{cal} > t_{tab}$] at both 5percent and 1 percent levels of significance, whereas the calculated value of the regression coefficient of the number of development banks (b_2) is greater than its tabulated value [$t_{cal} > t_{tab}$] only at 10 percent level of significance. Hence, the null hypothesis is rejected and it is concluded

that the regression coefficient (b_{1 &} b₂) both are statistically significant. Hence, there is a significant relationship between the credit made by development banks (C) and the total assets (A) as well as the number of development banks (Dn) in Nepal.

Again the calculated F-value is also greater than its tabulated value $[F_{cal} > F_{tab}]$ at both 5 percent and 1 percent levels of significance. So, the null hypothesis is rejected. Hence, it is concluded that the regression equations are statistically significant.

4.2.2 Regression results of the equation no. 2

$$\ln Y = b_0 + b_1 \ln C + U_t \qquad (2)$$

$$\ln Y = 6.33 + 0.65 \ln C \qquad (14.17) \qquad (14.32)$$

$$(R^2) = 0.9447$$

$$\overline{R^2}$$
 = 0.9401

$$F = 205.11$$

$$N = 14$$

Note: figures in the parenthesis are "t" statistic

In this model, two variables are used in which the GDP (Y) is dependent variable and the total credit by the development banks (C) as independent variables, i.e. Y = f(C).

The results of equation (2) reveal that the intercept term is seemed to be significant. Though the value of the independent variable is assumed to be zero, then there will be an existence of gross domestic product (Y) in the economy, i.e. 6.33 units. In other words, GDP (Y) can be produced even after the absence of the credit made by the development banks, due to the

intervening variables in this regression equation.

But the result does not ignore the role of the credit of the development banks in the economic development rather the result proves that there is significant role development banks in producing GDP in regression coefficient The Nepal. independent variable shows that there is a positive relationship between the GDP (Y) and the credit (C), which is a favorable result. The result shows that one percent change in the total credit of development banks (C) may result in 0.65 percent change in the GDP (Y).

The value of coefficient of determination (R^2) is higher in this model, which shows that the explanatory power of the equation is 94.47 percent that is 94.47 percent variation

in the GDP (Y) is explained by the total credit (C). Similarly, the value of adjusted coefficient of determination (\mathbb{R}^2) is also high in this model which shows that 94.01 percent of the total variations is explained by the fitted regression analysis. Thus, we can say that the total credit (C) of development banks can affect the volume of GDP (Y) significantly.

The calculated t-value of the regression coefficient of total credit (b1) is greater than its tabulated value $[t_{cal} > t_{tab}]$ at both 5 percent and 1 percent levels of significance. Hence, the null hypothesis is rejected and it is concluded that the regression coefficient (b1) is statistically significant. Thus, there is a significant relationship between the level of GDP (Y) and the credit made by the development banks (C).

Again the calculated F-value is also greater than its tabulated value $[F_{cal} > F_{tab}]$ at both 5 percent and 1 percent levels of significance. So, the null hypothesis is rejected. Hence, it is concluded that the regression equation is statistically significant. The positive sign of the slope indicates that there is positive relationship between the GDP (Y) and credit made by development banks (C) in this model during the sample period; which also the inference provides that the us development banks positively have contributed in economic development of Nepal.

Chapter-Five

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary and Conclusions

Nepal is a small country surrounded by big countries India and China. Globalization in the world economy compelled us to open our economy. Its formal financial system begins with the establishment of Nepal Bank Limited as the first commercial bank in 1937. Thereafter, on the decade of 60's Nepal Rastra Bank was established as the apex of the financial system. Fully government owned commercial bank was established in 1966 namely Rastriya Banijya Bank. It has adopted the economic liberalization including the financial sector liberalization since early 1990's. Under financial sector liberalization, to introduce different types of financial institutions specially the non-bank financial institutions, it formulated different Laws, such as Finance Companies Act, 1985, Development Bank Act, 1996. Though the Development Bank Act, 1996 came into force in 1996, till 1996 there was two development banks in existence due to its vagueness and the lack of clarity regarding the functions to be conducted by the development banks.

In due course of time, various circulars and directives were formulated and issued by Nepal Rastra Bank for the smooth functioning of development banks. Now, all the banks and financial institutions are incorporated with the recommendation of NRB under the Companies Act 2006, and conducted financial transactions under Bank and Financial

Institutions Act, 2006. NRB has also issued a Unified Directives 2004 and several amendments through circulars have been made as per the requirement of the time.

Due to clear, transparent and systematic legal framework, regulatory framework, prudential norms and close monitoring and supervision of the central bank, (i.e., Nepal Rastra Bank), the growth in the number of development banks is highly significant and satisfactory.

The number of development banks has not been distributed uniformly throughout the country; they are highly concentrated in Kathmandu valley.

Generally, development banks are non-depository financial institution, and operated in unitary banking system. Bank and Financial Institutions Act, 2006 has divided the banks and financial institutions into four category, which is also mentioned through the functions that are allowed by the different category bank and financial institutions. Similarly, the banks and financial institutions are also classified on the basis of paid-up capital for their incorporation and operation of financial transactions as prescribed in the Licensing policy 2007 issued by Nepal Rastra Bank.

Based upon the Bank and Financial Institutions Act, 2006 development banks are categorized as "B" class institutions and are allowed to conduct various financial transactions. Under the same Act, the functions prescribed for the development banks make it different from the commercial banks and are mainly concentrated in credit operations i.e. not allowed overdraft and hypothecation, foreign exchange transaction and operation of letter of credits (L/C) subject to NRB directives. There is also limit in financial resource mobilization. Despite these, development banks are equally mobilizing any type of deposits and lending activities as allowed to the commercial banks, therefore, the development banks are not non-depository or borrowing-lending financial institutions in Nepal. The basic reason behind this is to provide equal opportunities of banking services to the people where there is not any type of financial institutions in their surroundings. Notwithstanding, people are deprived of the banking services in the remote areas of the country.

Licensing policy for the incorporation and conduct of financial transactions 2007, issued by Nepal Rastra Bank has broadly classified development banks into two categories based upon the minimum paid up capital, as leasing development banks and non-leasing development banks. To conduct leasing finance business except in national level, it requires paid up capital of Rs. 300 million; for non leasing business Rs 200 million is required for 4-10 district development banks and 100 million up to 3 districts.

Under the same policy, to provide banking services in the rural areas where the people are deprived of the banking services due to lack of sufficient existence of bank/financial institutions i.e. five or less than five in number within the district, a development bank can be established with paid up capital of Rs. 20 million.

However, the present study is to fulfill some requirements of some academic career. Though the study has gathered some conclusion in the theory of banking and finance literature; particularly the role of finance in economic development of Nepal. The following are the conclusion derived in this study:

- i. The banking services provided by the development banks could not reach and touch the root of the policy by which it intended to provide banking services to the people at large; thereby people in the remote areas are still deprived of such services. The main reason behind this is the lack of other physical infrastructure and investment opportunities in those areas of our country.
- ii. The growth in the number of development banks is remarkable and the share of its assets in the whole financial system is growing persistently. The share was 1.7 percent in 2001 and stood 3.89 percent in 2007.
- iii. There is a continuous growth in the ratio between total assets of development banks and gross domestic products in Nepal. This ratio was 5.52 percent in 1993 and stood 10.31 percent in 2007.
- iv. Similarly, the share of deposits of development bank in whole financial system has grown up and reached to 3.93 percent in 2007, which was 1.30 percent in 2000. Loans and advances stood at 5.27 percent in 2007, which was 2.30 percent in 2001.
- v. Credit/deposit ratio of development bank is significantly higher than that of the commercial banks. This ratio is 88.03 percent in the case of development bank,

- 70.00 percent in the case of whole financial system and 60.70 percent in the case of commercial banks at mid-July 2006.
- vi. The deposit and credit of the development bank showed the sharp growth during one and half decade. The deposit was Rs. 4.23 billion in mid-July 1993 which reached to Rs. 35.83 billion in mid-July 2007. Similarly, the credit was Rs. 5.44 billion which reached to 31.14 billion in mid-July 2007.
- vii. The development banks are prioritized to conduct the merchant banking under the legal provision; still this function has not been efficiently conducted by the development banks.
- viii. To conduct lease finance, it requires additional paid up capital.
- ix. The review of literature gave us the justification of the role of development bank in economic development. This proves the role of development bank in economic development through finance.
- x. Based on the objective set out in this study, while assessing the role of development bank in Nepalese economy, the result of regression in equation number (2) has justified that the credit made by the development bank has positive effect on the economic growth of the country represented by the gross domestic product.
- xi. To compare the role of development bank, the result of the descriptive analysis shows that the share of development bank in the total assets of the whole financial system is increasing every year, so we can conclude that the contribution of the development bank in mobilizing and utilizing the financial resources for economic development is significant.
- xii. The result while testing the relationship of credit with the total sources of funds and number of development bank show the favorable result and the regression coefficients are also in line with the hypothesis set out in this study. This is also same in the test of relationship between the gross domestic products with credit made by the development bank.
- xiii. To sum up, the share of development banks' assets in the whole financial system is increasing, C/D ratio still high, empirical results justify the role of development

banks' lending in the economic development of the country. Still there is a need of policy review to expedite the merchant banking and lease financing in Nepal.

5.2 Recommendations

Based on the present study, the followings are the recommendations for the policy makers as well as the research workers in the field of banking and financial transactions business:

- 5.2.1 Increasing number of development banks creates challenge to the regulatory and supervisory authority to enhance its efficiency and effectiveness. Hence, the regulatory and supervisory authority, i.e., Nepal Rastra Bank must think its institutional capabilities with respect to the number of financial institutions regarding the close monitoring and supervision. It must consider its institutional capability prior to issuing the licenses to new banks and financial institutions. Otherwise, Nepal will also not be an exception to face banking crisis, which was faced by emerging South East Asian countries, Mexico and Argentina during the last decade of the twentieth century.
- No doubt, there is a significant contribution of the development banks in Nepalese economy. But, the concentration of banks and financial institutions including the development banks in the urban areas leads to the possibility of creating defaulters chain, which can ruin the whole banking industry and on the other hand it also could not fulfill the intended objectives envisaged in the present licensing policy. Therefore, the outcome of the present study felt that there is a great need to revise the existing licensing policy to divert the existence of financial institutions in the needy areas of the country.
- 5.2.3 To increase the outreach of the banking services even by the development bank, it requires minimum infrastructure throughout the country by which the development bank will also encouraged expanding its network in the semi-urban areas and gradually in remote areas. Therefore, we suggest the government to prioritize their fiscal policy towards the development of infrastructures in the rural areas.

- 5.2.4 Due to the similarities in the most of the functions carried out both by the commercial banks and the development bank in Nepal, there is a need for review of policy regarding development banks to focus to divert their investment towards more productive sectors.
- As spelled out in the recently announced monetary policy for the fiscal year 2007-08, the provision for deprived sector lending by the development banks in the succeeding years, the researcher hereby suggests to introduce it from the coming fiscal year 2008-09. This provision will lead to persuade for employment generation as well as poverty alleviation in Nepal.
- 5.2.6 As mentioned in the Bank and Financial Institution Act, 2006, the task basically prescribed for the development banks, i.e. merchant banking and lease finance; which are still in the primitive stage. Therefore, the regulator should revise the minimum paid-up capital required to conduct the lease finance.
- 5.2.7 The intercept term is negative in equation (1) which implies that there may be other factors affecting the credit. Thus, the further researcher should look those variables.

Appendix-1

Legal Framework for the incorporation and operations of Development Bank in Nepal

As mentioned in the preamble of Development Bank Act 1996, it is expedient to incorporate Development Banks for non-banking business having brought and dynamism in the economic development of the country. In order to foster the

economic benefit of the people through institutionalized investment considering the scattered capital in the country.

The Bank and Financial Institution Ordinance, 2004 repealed the Development Bank act 1996, consequently by the prevailing the Bank and Financial Institution Act 2006.

Both the above-mentioned Acts are implemented or directly concerned with the operation of the financial transaction by the Development Banks. But the required law for the incorporation of Development Bank is the Company Act, 2006 under which the Development Banks are incorporated as a public limited company. Thus, the BAFIA, 2006 and Company Act, 2006 are the main legislation to incorporate and authorize the operations of the bank and financial institutions including the Development Banks in Nepal.

(Source: NRB (2006), Bank and Financial Institution Act, 2006, Kathmandu)

Appendix-2

Functions of Development Banks in Nepal

According to the Bank and Financial Institution Act 2006 has categorized the Development Banks as a "B" class financial institution, where category "A" refers to the commercial bank, "B" refers to the development bank, "C" refers to the finance company and "D" refers to the micro credit development banks.

As mentioned in the clause 47 sub-clause (2) of BAFIA 2006, Subject to this Act and its memorandum and articles of association, a Class "B" licensed institution may conduct the following types of financial (NRB: August 2006):

- Accept deposits with or without interest and refund such deposits, subject to the limit prescribed by the Rastra Bank
- b. Supply credits other than hypothecation as prescribed.
- c. Foreign exchange transaction subject to the existing laws and NRB directives.
- d. Supply credits for businesses relating to hire-purchase, leasing and housing, as well as for service enterprises.
- e. Engage in merchant banking business subject to NRB directives.
- f. Supply credit on the basis of co-financing by joining hands with other licensed institutions according to the agreement concluded for the purpose so as to divide the collateral (pari passu).
- g. Supply credit against the guarantee provided by any domestic bank or financial institution.
- h. Issuance of guarantee on behalf of the customer and obtaining collateral for the same.
- i. Issuance and acceptance of Letter of exchange, letter of promise, cheques, traveler cheques, draft or hundy.
- j. Accepting deposit, payment and making credit by using automated teller machine and cash dispensing machine.

- k. Supply overdraft facility to the creditworthy customer.
- I. Obtain credits by pledging its movable or immovable assets as collateral.
- m. Supply a fresh credit in a lump sum or in installment against the security of the same movable or immovable assets, which have already been pledged with it or with any other licensed institution, to the extent covered by the total value of such security.
- n. Issuance and acceptance of Letter of Credit (L/C) subject to NRB directives.
- o. Properly manage, sell or lease out its assets.
- p. Remit money within the country through bills of exchange, cheques or other financial instruments; buy and sale of share or debenture, bond etc., reimburse the bonus of shares, interest or promissory noted, debenture, bonds.
- q. Provide services as the commission agents of the customers for share, debenture or trustee
- r. Manage safe deposit vault,
- s. Provide off balance sheet operation subject to NRB directives.
- t. Supply credits not exceeding the amount prescribed by the Rastra Bank to ensure the economic upliftment of the destitute class, low-income families, and victims of natural calamities and inhabitants of any area of the country with the provision of individual or collective guarantee.
- u. Exchange with the Rastra Bank or any other licensed institution particulars, information or notices regarding debtors or customers who have obtained credits or any other facility from it or any other licensed institution.
- v. Guarantee for the customer to get loan from any NRB licensed institutions.

- w. Subject to the limits prescribed by NRB to mobilize fund; mobilize capital through share, debenture, and bond, saving certificates or any other financial instruments.
- x. Obtain refinance from NRB and borrow from other NRB licensed institutions.
- y. Re-lend or manage the fund obtained by Government of Nepal or other domestic or foreign agencies for the promotion of projects.
- z. Study, research, survey for the establishment, operation of projects; provide training, consultancy and other information.
- aa. Write off credit subject to the bye-rules framed by the Board.
- bb. Prescribe conditions according to need in order to protect its interests while supplying credit to any individual or institution or carrying out any transaction with him/her/it.
- cc. Supply installment or hire-purchase credit to any individual, firm, company or institution for vehicles, machinery, tools, equipment, durable household goods or similar other movable property.
- dd. Supply credit to any individual, firm, company or institution for the purchase or construction of residential houses or godowns, or for the purchase of lands for the construction of such residential houses or godowns.
- ee. Perform such other functions as are prescribed by the Rastra Bank.

(Source: NRB (2006), Bank and Financial Institution Act, 2006, Kathmandu)

Appendix-3

Minimum Paid-Up Capital Requirement to incorporate a development bank in Nepal

The power to prescribe the minimum paid up capital to incorporate bank or financial institution is generally vested with Nepal Rastra Bank under NRB Act, 2000 and BAFIA 2006. Under such provisions made in these Acts Nepal Rastra Bank from time to time, prescribes including development banks.

As mentioned in the licensing policy to incorporate and operate bank or financial institutions in Nepal, Nepal Rastra Bank has recently prescribed a minimum capital for the incorporation and to conduct financial transactions effective from mid-July 2007 for development banks are as follows (NRB: April 2007):

Amount in million rupees

Particulars	National Level	4-10 Districts [#]	1-3 Districts [#]
Development Bank	640	300 for leasing and 200 for non leasing	300 for leasing and 100 for non leasing

excluding Kathmandu valley

Under the same policy, there is a special provision for the incorporation of development banks in the remote/rural areas in the districts where the number of bank/financial institutions including the branches is five and/or less, the minimum paid up capital requirement is reduced to Rs. 20 million, to cater financial intermediation services to the people who are deprived from such financial services.

To incorporate a development bank, the minimum paid up capital invest by the promoters must be at least 51 percent of its issued capital. Another provision is minimum 30 percent of the issued capital must be allocated to the general public, out of which five percent can be allocated for the employees of the concerned bank/financial institution.

Development banks can also be incorporated with the joint venture of foreign bank or financial institution. Minimum share participation in the issued capital of a development bank by a foreign joint venture bank or financial institution must be at least 20 percent and the maximum limit is 85 percent.

If a foreign bank/financial institution invest more than 50 percent and less than 80 percent the appropriation for the general public must be 20 percent and at the situation of 85 percent foreign joint venture it will be 15 percent and out of which 5 percent can be allocated to the employees of the development banks.

It is noteworthy that there is a provision, to obtain a prior approval of the respective foreign bank or financial institutions' regulating authority or the central bank to participate in a joint venture to incorporate a development bank in Nepal. This provision is equally applicable to incorporate commercial bank or other financial institutions in Nepal.

Even though, the development banks business can conducted financial intermediation in developing activity, but it is quite different in the case of Nepal. It can do most of the commercial banking also.

(Source: www.nrb.org.np)

Appendix-4

Major Highlights on the Prudential Norms namely Unified Directives Issued for Banks and Financial Institutions including the Development Banks in Nepal (NRB: 2005)

As we know that situation are dynamic and dynamism demands changes in the existing policies, rules and regulation, as a result, the regulation for banks and financial institutions also changes. In this connection, Nepal Rastra Bank consolidated all the regulations issued for separate type of banks and financial institution as a Unified Directives effective from the fiscal year 2005/06 and it is equally applicable to the development banks licensed by Nepal Rastra Bank. The norms mentioned in the modified and consolidated Unified Directives (2005), are briefly discussed below:

a. Directive No. 1 Capital Adequacy Norm: - Effective from the fiscal year 2005/06 the licensed institutions shall maintain minimum capital fund on the basis of their risk weighted assets as follows:

Institutions	Required Core Capital	Required Capital Fund
'A', 'B' and 'C' Class	6.0 percent	12.0 percent
'D' Class	4.0 percent	8.0 percent

Here, 'A' class institution refers to the Commercial Banks

'B' class institution refers to the Development Banks

'C' class institution refers to the Finance Companies

'D' class institution refers to the Micro credit development banks

But later the percentage of minimum capital fund requirement was revised and determined 5.5 percent core capital and 11 percent for total capital fund instead of 6 and 12 percent.

In this directive, capital fund means the aggregate of core capital and supplementary capital, which includes the following:

Core Capital	Supplementary Capital	
Paid Up Capital	General Loan (Pass) Loss Provision	
Share Premium	Assets Revaluation Reserve	
Irredeemable Preference Shares	Hybrid Capital Instruments	
General Reserve Fund	Unsecured Subordinated Term Debt	
Accumulated Profit/Loss	Exchange Equalization Fund	
Capital Redemption Reserve	Provision for Possible Loss on Investment	
Capital Equalization Reserve	Investment Adjustment Fund	
Other Free Reserve		

Any licensed institution not maintaining minimum capital fund, any of the following actions may be initiated:

- Suspension of opening new branch
- Suspension of access to refinance facilities of NRB
- Restriction on lending activities of the licensed institutions
- Restriction on acceptance of new deposits
- Any actions may also be initiated under the clause 99 and 100 of NRB Act 2002.
- b. Directive No. 2 Classification of Loans and Loan Loss Provision Norm: Effective from fiscal year 2005/06 the licensed institutions shall classify the loans and advances as follows:

S.N.	Types/Category	Duration	
1	Pass	No past due and past due for 3 months	
2	Substandard	Past due for more than 3 and upto 6 months	
3	Doubtful	Past due for more than 6 months and upto 1 year	
4	Loss	Past due for more than 1 year	

The loan loss provision on the outstanding loans and advances and bills purchases shall be provided on the basis of classification made as per this directive, are as follows:

S.N.	Types/Category	Loan Loss Provision
1	Pass	1 percent
2	Substandard	25 percent
3	Doubtful	50 percent
4	Loss	100 percent

Despite this, there is special provision for restructured and rescheduled loans and for the loan provided personal/corporate guarantee an additional

provision by 20 percent point shall also be provided. In case of non-compliance of the directive may be initiated actions under section 100 of NRB Act 2058.

c. Directive No. 3 Single Obligor Limit Norm: - Fixation of limit on credit and facilities: A, B and C class licensed institution may extend to a single borrower or group of related borrowers the amount of FUND BASED loans and advances upto 25 percent of the core capital fund and NON-FUND BASED off balance sheet facilities like letters of credit (LC), guarantees, acceptances, commitments upto 50 percent of the core capital fund.

The exposure limits shall not be applicable in respect of the following:

- Credit and facilities extended against own fixed deposit receipts, government securities, NRB Bonds as well as against unconditional guarantees issued by the World Bank, Asian Development Bank and International Finance Corporation including multilateral institutions and internationally rated Top Thousand World Banks.
- Loans/advances and facilities provided by the 'A' class-licensed institution to Nepal Oil Corporation and Nepal Food Corporation.

Where a licensed institution has extended loan or facility to one customer, firm, company or group of borrowers in excess of the exposure limit, such excess credit or facilities shall be provided with cent percent additional loan loss provisioning to cover the concentration risk.

- d. Directive No. 4 Accounting Policies and Formats of Financial Statements Norm: - According to this regulation, NRB has prescribed the guidelines relating to financial statements, principal accounting policies, notes on accounts, brief explanation on accounting heads of the Balance Sheet, Profit and Loss Accounts, Appropriation Account, Statement of changes in equity, norms relating to cash flow statement and the directives forms (financial statements) are also given in the annexure.
- e. Directive No. 5 **Minimization of Risks Norm**: According to this regulation, NRB classified the risks, arrangement for minimization of liquidity risks,

interest rate risks, foreign exchange risks, and credit and investment risks, which are provisioned for the purpose of monitoring the risks relating to banking and financial activities.

- f. Directive No. 6 Good Corporate Governance Norm: This directive states about the code of ethics to be complied by the board of directors, duties and responsibilities to be borne by the board of directors, appointment of the executive chief, code of ethics for employees, provision related to Audit Committee, prohibition to extend credit to the directors, promoters or shareholders in the promoter group or the shareholders holding more than one percent of the total shares sold etc.
- g. Directive No. 7 **Timeframe for the Implementation of Regulatory Directives Issued in Connection with Inspection and Supervision Norm:**
 - Under this directive, it covers mainly those subjects pointed out in the inspection/supervision report, which are : response to the compliance which are stated on the on-sight inspection report, loan loss provisioning, loan portfolio improvement plan, capital adequacy and submission of capital plan to NRB, management of assets/liabilities, internal audit and control, implementation of plans, policies and procedures, and progress reports follow up.
- h. Directive No. 8 Investment Norm: This directive focuses on the arrangement as to implement the investment policy under approval, arrangements for investment in Government of Nepal's securities and NRB bonds; arrangement for investment in shares and debenture of organized institutions, arrangement for underwriting of shares and debentures, arrangement for review of investment portfolios, valuation of shares and debentures and actions for non compliance of directives on investment.
- i. Directive No. 9 Filing of Statistical Returns to NRB Norm: This directive has prescribed the forms and formats, which should be submitted, to NRB within the stipulated time. The stipulated timeframes comprises weekly statements, fortnightly statement, monthly statements, quarterly statements, half yearly statements and yearly statements.

j. Directive No. 10 Transfer or Sale of Promoter Shares of Licensed Institutions Norm: - Shares held by promoter or shareholders under the promoters group may be transferred on their demise, in the name of their legal heir or nominees under the existing legal provisions, the information of which shall be given to NRB within 15 days.

Promoter shares are not transferable until five years of its operations. After five years of its operation of any licensed institution, the promoter shares can be transferred to the person/firm or company eligible to buy such promoter shares but there is a first right to refuse by other existing promoters of the same licensed institution.

In case of non-compliance, the respective licensed institution can forfeit the promoter shares.

k. Directive No. 11 Consortium Finance Norm: - Definition of consortium finance has given as unless the subject or context otherwise requires, in this directives, consortium financing means loans and advances and facilities provided to any customer, firm, company or project on the basis of mutual understanding by two or more licensed institutions under an agreement.

This directive also describes the necessary conditions for participation in consortium financing, prohibition to lend and open account of the customers by other licensed institutions, time period for making decision for disbursement of credit, selection of participating licensed institutions, constitution of consortium group, selection of lead institution, lead institution to disburse and collect loans, functions duties and rights of the lead institution, majority decision to prevail, liabilities and duties of participating members of the consortium, arrangements relating to additional loan, arrangement for leaving the consortium, power to appoint auditor or consultant and returns to be filed on consortium financing.

Finance companies are free to fix or determine its interest rate both in deposit and lending/lease, but they could not fix the interest in a flat rate. The interest

rate must be determined from the respected authority and should be made public.

I. Directive No. 12 Credit Information and Blacklisting Norm: - This directive has tremendous positive impact in the banking industry in Nepal. It has made an arrangement relating to Credit Information Center, Credit Information Center Limited (CICL), registered and operating under the company Act 2063 (now 2063) has been named as Credit Information Center ("Center") for the purpose of section 88 of NRB Act 2002 and Rule 38 of Nepal Rastra Bank Credit Information By-rules 2059.

This directive clearly states the provision regarding credit information and blacklisting, such are quarterly submission of reports to the center relating to borrowers by the licensed institutions, credit information to be obtained compulsorily, procedure for inclusion in the blacklist, classification of borrowers, i.e., willful defaulters and/or non-willful defaulters, prohibition to extend credit by any licensed institutions to blacklisted borrowers, special arrangements with respect to collateral valuators, special arrangement to the Auditors, recommendation as to confiscation of the passports, arrangements for blacklisting, removal from the blacklist, blacklisting in respect of consortium loans, service of notice prior to including in blacklist, obtaining acceptance of borrower or guarantor, center may ask for information and statements, center may inspect, publishing particulars of blacklisted borrowers and other arrangements like maintenance of secrecy, past due loan of less than 2.5 million rupees, fine and penalties; willful defaulters not to hold public positions etc.

m. Directive No. 13 Maintenance of Liquidity Norm: - The 'A' class licensed institution shall maintain mandatory balance at the rate of five percent of their total deposit liabilities, and 'B' and 'C' class licensed institutions that are accepting current account deposits shall maintain five percent of their total deposit liabilities with Nepal Rastra Bank.

However, 'B' and 'C' class licensed institutions accepting other than the current deposit shall maintain mandatory balance at two percent of their total deposit plus borrowing liabilities.

The provision for "cash in vault" under CRR requirement is withdrawn.

Despite, 'B' and 'C' class licensed institutions situated in the location where there is no office of Nepal Rastra Bank may maintain a separate current account for this purpose with the nearly 'A' class institution.

Penalty shall be imposed in case of shortfall in CRR as follows:

- For first time shortfall in maintaining the mandatory balance at the rate percentage of existing bank rate on such short fall amount.
- For second time shortfall in maintaining the mandatory balance at double the rate percentage of existing bank rate on such short fall amount.
- ♣ For third and successive shortfalls in maintaining the mandatory balance at triple the rate percentage of existing bank rate on such shortfall amount within a fiscal year.
- n. Directive No. 14 Branch Expansion Norm: The licensed institutions shall not open or close or shift/transfer or merge any branch office or any type of offices without a prior approval of Nepal Rastra Bank.
 - 'A', 'B' and 'C' class licensed institutions fulfilling the minimum paid up capital including the capital plan and maintained capital fund, shall apply for opening of branch office within the approved area with business plan to NRB. The branch office must be operated within one year from the date of approval. To strengthen the management information system (MIS), a plan for networking should also be submitted; non-performing assets (NPA) must be less than five percent of total loans and advances. Any licensed institutions having its head office/ branch office at Kathmandu are not allowed to open its contact office within Kathmandu valley.
- o. Directive No. 15 Interest Rates Norm: 'A', 'B' and 'C' class licensed institutions are free to fix interest rates for both deposits and lending,

including fixation of types of interest and procedures. Licensed institutions other than "D" class institutions cannot fix flat interest rates on loans and advances. Licensed institutions shall implement the interest rates for deposits and lending, procedures for calculation of interest, penal interest, commission and service charges only after approval. The institutions cannot vary the interest rate for deposits in excess of 0.5 percent over the published rates.

The licensed institutions shall compulsorily submit particulars of interest rates on deposits and lending to NRB within seven days of each quarter ending. Further the licensed institutions shall submit the whole arrangements and procedures relating to interest rates as per the approval made by them at the time of initial implementation and changes made thereto within seven days. It also required to be published in the newspapers for public consumption.

p. Directive No. 16 Financial Resources Mobilization Norm: - Limit for mobilization of financial resources for each type of financial institutions has clearly been stated in this directive. According to this, "A" class-licensed institutions may mobilize financial resources without any limitation. However, in respect of institutional deposits, effective from fiscal year 2007/08 it will not exceed 20 percent of total deposits, this provision is also equally applicable to the development banks and finance companies.

Similarly, the "B" class licensed institutions may mobilize financial resources (with or without interest of all types of deposits, borrowings and debt instruments) upto 20 times of their core capital fund.

The "C" class licensed institutions, i.e. finance companies may mobilize financial resources (with or without interest of all types of deposits, borrowings and debt instruments) upto 15 times of their core capital fund. The same is 30 times of core capital for "D" class licensed institutions.

A licensed institution which has fulfilled the following conditions, may apply to Nepal Rastra Bank for approval to issue debenture and/or other debt instruments upto 50 percent of core capital fund remaining within the limit prescribed by NRB:

- Completed five years of financial operation
- Completed three years of enlistment of the shares after Public share issue with Nepal Stock Exchange Ltd.
- Not having any accumulated loss.

Nepal Rastra Bank may provide approval for issuing debentures after necessary scrutiny of the application.

q. Directive No. 17 Deprived Sector Lending Norm: - Recently, Nepal Rastra Bank, effective from the fiscal year 2007/08, has issued a new directive for deprived sector lending. Priority sector lending for commercial bank has been completely abolished from the current fiscal year. The directive for deprived sector lending is directly applicable to the class "A" and "B" licensed institutions. "A" class-licensed institution must lend to the deprived sector out of three percent of the total loans and advances, which is one percent in the case of development banks.

In the monetary policy for fiscal year 2007/08 announced by NRB has spelled out the provision for deprived sector lending by finance companies in succeeding fiscal years.

Finance companies can get benefit from the current deprived sector lending policy for "A" and "B" class licensed institutions. In this directive there are several avenues for indirect lending by them to channelize the funds to the deprived sector. Finance companies intended to diversify its business and reduce the cost of fund, can be involved deprived sector lending activities in which "A" and "B" class licensed institutions can provide funds in lower rate by which finance companies can serve mass of the people and whereby increases its earnings.

(Source: NRB (2006), Unified Directive issued for Banks and Financial Institutions, Kathmandu)

Appendix-5

Asset/GDP Ratio of Development Banks

	•
Year	Assets/GDP%
1993	5.52
1994	6.04
1995	6.68
1996	6.97
1997	7.11
1998	7.82
1999	8.03
2000	8.06
2001	9.11
2002	8.95
2003	10.29
2004	9.64
2005	10.84
2006	10.31

Source: Ministry of Finance, GoN. Nepal Rastra Bank.

Appendix-6

Credit/Deposit Ratio of Development Banks

Year	C/D Ratio
1993	128.80
1994	138.32
1995	149.37
1996	158.57
1997	158.96
1998	151.81
1999	131.89
2000	128.43
2001	85.51
2002	111.66
2003	107.72
2004	108.42
2005	88.03
2006	86.90

Source: Ministry of Finance, GoN. Nepal Rastra Bank.

Appendix-7 **Growth of Deposit and Credit of Development Banks**

Year	Deposits	Credit	Deposit growth	Credit Growth
1993	4227.1	5444.3		
1994	5319.7	7358.2	25.85%	35.15%
1995	6425.9	9598.2	20.79%	30.44%
1996	7495.4	11885.4	16.64%	23.83%
1997	8870.6	14100.4	18.35%	18.64%
1998	10194.8	15476.6	14.93%	9.76%
1999	12877.1	16984.2	26.31%	9.74%
2000	15097.3	19389.9	17.24%	14.16%
2001	19973.6	17079.8	32.30%	-11.91%
2002	24677.4	27554.8	23.55%	61.33%
2003	28802.4	31026.8	16.72%	12.60%
2004	29427.1	31905.2	2.17%	2.83%
2005	33957.8	29893.7	15.40%	-6.30%
2006	35832.7	31139.9	5.52%	4.17%
Average 13 years			18.14%	15.73%

Amount in million rupees

Source: Ministry of Finance, GoN. Nepal Rastra Bank.

Appendix-8

Basic Data For Regression Analysis

Year	Y	Dn	D	С	A
1993	171492	2	4227.1	5444.3	9467.2
1994	199272	2	5319.7	7358.2	12044.8
1995	219175	2	6425.9	9598.2	14633.2
1996	248913	2	7495.4	11885.4	17356
1997	280513	2	8870.6	14100.4	19942.5
1998	300845	2	10194.8	15476.6	23537.8
1999	342036	6	12877.1	16984.2	27458.2
2000	379488	6	15097.3	19389.9	30578.5
2001	411217	9	19973.6	17079.8	37443.9
2002	422676	10	24677.4	27554.8	37841.4
2003	456675	11	28802.4	31026.8	47014.6
2004	496745	14	29427.1	31905.2	47901.5
2005	533538	26	33957.8	29893.7	57814.9
2006	582948	31	35832.7	31139.9	60098.5

Y=GDP at producer's price

D= Total Deposit of Development Banks

Dn= Number of Development Banks

C= Total Credit by Development Banks

A= Total sources of funds or the total Assets of Development Banks

Source:

Ministry of Finance, GoN.

Nepal Rastra Bank.

Appendix-9
Natural Log Transformed Data

Year	Y	ln Y	Dn	ln Dn	С	ln C	A	ln A
1993	171492	12.05	2	0.69	5444.3	8.60	9467.2	9.16
1994	199272	12.20	2	0.69	7358.2	8.90	12044.8	9.40
1995	219175	12.30	2	0.69	9598.2	9.17	14633.2	9.59
1996	248913	12.42	2	0.69	11885.4	9.38	17356	9.76
1997	280513	12.54	2	0.69	14100.4	9.55	19942.5	9.90
1998	300845	12.61	2	0.69	15476.6	9.65	23537.8	10.07
1999	342036	12.74	6	1.79	16984.2	9.74	27458.2	10.22
2000	379488	12.85	6	1.79	19389.9	9.87	30578.5	10.33
2001	411217	12.93	9	2.20	17079.8	9.75	37443.9	10.53
2002	422676	12.95	10	2.30	27554.8	10.22	37841.4	10.54
2003	456675	13.03	11	2.40	31026.8	10.34	47014.6	10.76
2004	496745	13.12	14	2.64	31905.2	10.37	47901.5	10.78
2005	533538	13.19	26	3.26	29893.7	10.31	57814.9	10.97
2006	582948	13.28	31	3.43	31139.9	10.35	60098.5	11.00

GDP at producer's price

Total Deposit of Development Banks

Number of Development Banks

Source: Calculated from Appendix-8

Appendix-10 **Data for Regression Equation No. 1**

 $lnC = b_0 + b_1A + b_2Dn$

Year	ln C	ln A	ln Dn
1993	5.278319	5.746203	2.079442
1994	5.381601	6.018593	2.397895
1995	6.508769	6.999422	3.091042
1996	7.524561	7.824046	3.526361
1997	8.207129	8.540324	3.688879
1998	8.608495	9.015055	3.761200
1999	8.884472	9.271718	3.806662
2000	9.111955	9.476543	3.828641
2001	9.293302	9.667575	3.871201
2002	9.388487	9.822982	3.988984
2003	9.580109	10.004057	4.043051
2004	9.772296	10.210935	4.060443
2005	9.962841	10.323381	4.077537
2006	10.206514	10.567232	4.248495

Y=GDP at producer's price

D= Total Deposit of Development Banks

Dn=Number of Development Banks

C= Total Credit by Development Banks

A= Total sources of funds or the total Assets of Development Banks **Source:** Appendix-9

 $\label{eq:Appendix-11} \textbf{Data for Regression Equation No. 2} \\ lnY=b_0+b_1C$

Year	ln Y ln C	
1993	12.052292	5.278319
1994	12.202426	5.381601
1995	12.297626	6.508769
1996	12.424859	7.524561
1997	12.544375	8.207129
1998	12.614350	8.608495
1999	12.742671	8.884472
2000	12.846578	9.111955
2001	12.926876	9.293302
2002	12.954361	9.388487
2003	13.031727	9.580109
2004	13.115832	9.772296
2005	13.187286	9.962841
2006	13.275853	10.206514

Y=GDP at producer's price

C= Total Credit by Development Banks

Source: Appendix-9

BIBLIOGRAPHY

- Acharya, K.P., N.B. Thapa & S. Sharma (1998), **Economic Liberalization in Nepal: Sequence and Process**, National Labor Academy and OXFAM GB-Nepal, Kathmandu.
- Attri, V.N. and, Neera Verma (1997), "Development of Financial System and Economic growth in India: 1960-91", in **Financial Sector Reform and Economic Growth in India**, (ed.) S. Murty, RBSA Publishers, Jaipur, India.
- Banchero, Paola (1997), "Financing Fight: Non-bank lenders want nothing more than to take business away from traditional banks." for **Kansas City Business Journal, Kansas**, USA.
- Beck, T., R. Levine and N. Loyaza (2000), "Finance and Sources of Growth" for **Journal of Financial Economics**, 58, pp 261-300 St. Luise, USA.
- Caprio, Gerard, and Patric, Honohan (2001), for **Finance for Growth, World Bank**, Washington D.C.
- Development Research Group (2005), "Finance and Development", for **Knowledge in Development Notes**, the World Bank, Washington D.C.
- Dmetrides, P.O., and K.A. Hussein (1996), "Does financial Development cause Economic Growth?" for **Journal of Development Economics**, Vol. 51(2), pp387-411 New Haven, USA.
- Griffin, Cynthai E. (1998), "Breaking the Bank", for Entrepreneur, New York, USA.
- Gujarati, D. N. (2004), **Basic Econometrics**, Fourth Edition, Tata McGrew-Hill, New Delhi, India.
- http://www.thefreedictionary.com/p/finance+companies, 4 July 2007.
- http://www.strategies.ic.gc.ca/epic/internet/insbrp-rppe.nsf/en/rdo 1068e.html, 5 July 2007.
- http://www.answers.com/library/finance+and+investment+terms-cid-1908862426, 7 July 2007.
- http://www.answers.com/library/Encyclopedia+of+small+business-cid-

1908862426, 10 July 2007.

http://www.britannica.com/eb/article-9034278/finance-company, 21 July 2007.

http://www.answers.com/topic/finance-company, 25 July 2007.

http://www.nidc.org.np/indexpage.htm

http://adbl.gov.np/introduction.html#intro

- Jung, Woo S. (1986), "Financial Development and Economic growth: International Evidence", for **Journal of Economic Development and Cultural Change** 34/2, pp 333-346 Los Angels, USA.
- Kantawala, Amita S. (2002), "Financial Performance of Non-banking finance companies in India", for **The INDIAN ECONOMIC JOURNAL** Volume 49 (1), Mumbai, India.
- Koetter, M. and M. Wedow (2006), **Finance and growth in a bank-based economy: is it quantity or quality that matters?**, Deutsche BundesBank, Germany.
- Koutsoyiannis, A. (1977), **Theory of Econometrics**, the Macmillan Press Ltd., Second Edition, London
- Kunt, Demirgue and Ross Levine (1996b), **Financial Development and Economic growth: Theory and Experiences from Developing countries**, edited by N. Hermes and R. Lensink, New Fetter Land, London, 1996b.
- Levine, Ross (1997); "Financial Growth and Economic Development: Views and Agenda", for **Journal of Economic Literature** 35(2), pp 688-726 Pittusburg, USA.
- Machiraju, H.R. (1998), **Indian Financial System**, Vikas Publishing House Pvt. Ltd. Chennai, India.
- Ministry of Finance (2007), **Economic Survey, 2006/07** Ministry of Finance, Government of Nepal, Kathmandu
- Nepal Rastra Bank (2006), **Bank and Financial Institution Act, 2006**, NRB, Kathmandu, Nepal, pp 60-64.
- ----- (2006a), Banking and Financial Statistics, No. 47, Kathmandu,

Nepal.
(2008), Banking and Financial Statistics , No. 50, Kathmandu, Nepal.
(2001), Directives issued for Finance Companies (including the amendments) by Nepal Rastra Bank, Kathmandu, Nepal.
(2005), Development Bank Act, 2005, NRB, Kathmandu, Nepal.
(1996), Forty years of Nepal Rastra Bank, NRB, Kathmandu, Nepal.
(2007), Licensing Policy to incorporate a new bank/financial institutions and conduct financial transactions, NRB, Kathmandu, Nepal.
(2007a), Monetary Policy for Fiscal Year 2007-08 , NRB, Kathmandu, Nepal.
Quarterly Economic Bulletin, various issues, NRB, Kathmandu, Nepal.
(2005), Unified Directives (including the amendments) issued for the Licensed Institutions by Nepal Rastra Bank, Kathmandu, Nepal.
Neupane, H.P. (2005), Financial Development and Economic Growth , an unpublished dissertation submitted to the Faculty of Management, Central Department of Public Administration, T.U., Nepal.
Paudel, Dr. D.P. (2005),"Role of NRB in Financial Sector Development", for Nepal Rastra Bank in fifty years , Nepal Rastra Bank, Kathmandu.
Paudel, N.P. (2005), "Financial System and Economic Development", for Nepal Rastra Bank in Fifty Years, Nepal Rastra Bank, Kathmandu.
Poudyal, Upendra K. (1996), "Financial Development and Economic Growth in Nepal", for Nepal Rastra Bank Samachar , Nepal Rastra Bank, Kathmandu.

Sampath, R. K. and Hussain, Z (1980), "Demand for Money in India", for **The Indian Economic Journal**, Vol. 29(1), Mumbai, India.