FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN NEPAL

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RECOMMENDATION LETTER

This Thesis entitled **FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN NEPAL** has been prepared by **Dhansobha Kumari Budha** under my guidance and supervision. I hereby recommend this thesis for final examination by the Thesis Committee as a partial fulfillment of the requirements for the Degree of MASTER OF ARTS IN ECONOMICS.

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APPROVAL LETTER

This thesis entitled **FINANCIAL DEVELOPMENT AND ECONOMIC GROWTH IN NEPAL** prepared by **Dhansobha Kumari Buddha** in the partial fulfillment of requirements for the Degree of MASTER OF ARTS in ECONOMICS has been accepted.

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Dhansobha Kumari Budha

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ABBREVIATIONS/ACRONYMS

BFIS	= Bank and Financial Institutions
NRB	= Nepal Rastra Bank
ADF	= Augmented Dickey Fuller Test
FNGO	= Financial NGO licensed by NRB
ADB/N	= Agricultural Development Bank/Nepal
GoN	= Government of Nepal
SCCS	= Savings and Credit Cooperatives
GDP	= Gross Domestic Product
M2	= Broad Money
CPS	= Credit to the Private Sector

CHAPTER- I

INTRODUCTION

1.1 Background of the Study

Financial system refers to the existence of banks and non-bank financial institution in a formal and organized way in the economy. Commercial banks primarily accept deposits and extend credit. And, other financial institutions include development banks, finance companies, savings and credit unions, insurance companies, pension funds and provident funds. Financial intermediaries channelize the financial resources from surplus units to the deficit units or sectors in the economy. Financial sector which comprises institutions, instruments and process plays important roles in the economic development of a country through various channels.

A financial market is widening its scope from a particular place to a process (system) of buying and selling of financial instruments. Financial market can be classified on the several bases. Market may be debt or equity market, private or public market, exchange or over the counter market. Financial market can be further divided into money market and capital market on the basis of the nature of the instrument dealt in the market. Money market basically involves the trading of short-term securities with maturity period of a year or less. Capital market is the market for long-term debt and corporate stocks. Capital market can further be classified as primary market and secondary market. Newly issued securities are traded in the primary market whereas trading of once issued securities are traded in the secondary market. A wide variety of financial institutions may exist in the financial market.

The history of the modern financial system of Nepal began in 1937 with the establishment of Nepal bank limited as the first commercial bank of the country. It was established as a semi private commercial bank under Nepal bank act. It was the only formal financial institution before the establishment of the Nepal Rastra Bank (NRB) as the central bank of Nepal. NRB was established in 1956 under the NRB Act 1955. (NRB, 2005) Establishment of the NRB as a central bank of Nepal was another major step in the development. 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. During a short period of last two and half decades, the Nepalese financial system has grown significantly both in terms of business volume and the size of the market.

Broadly, Nepalese financial sector can be divided into two parts, namely the banking system and the non-bank financial system. The banking sector institutions consists of Commercial Banks, 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). As of Mid-July 2016, the number of Commercial Banks were 28, where as there are 57 Development Banks, 36 Finance Companies, 48 Micro Credit Development Banks, 15 Saving and Credit Cooperative Societies, and 25 Non-Government Organizations. Moreover, non-banking financial institutions include 27 insurance companies, 116 post offices, Employees Provident Fund, Nepal Stock Exchange Limited, Insurances Companies, Deposit Insurance and Credit Guarantee Corporation, Credit Information Center Limited, and Citizen Investment Trust (NRB, 2016).

Growth of financial sector helps development of economy through easing the exchange of goods and services by providing payment services, mobilizing and pooling savings from a large number of investors, acquiring and processing information about investments and enterprises, allocating society's savings to its most productive use, monitoring investments and exerting corporate governance after providing finance and helping diversification and reducing liquidity risk. Nepalese financial sector has grown at a rapid pace during the last three decades. It is important to assess the role of the growth of financial sector in enhancing level of access to finance in the economy. Access to finance refers to the possibility that economic agents can access financial services, including credit, deposit, payment, insurance, and other risk management services. Those who involuntarily have no or only limited access to financial services is referred to as the *unbanked* or *underbanked*, respectively. There are large number of branches of banks and financial institutions in some urban areas while there is low presence of the branches in remote areas.

Under this background, the study entitled "financial development and economic growth in Nepal" attempts to study the growth of financial sector, access to financial services and relationship between financial development, and economic growth in Nepal.

1.2 Statement of the Problem

Financial liberalization policy after 1980s played a crucial role for the establishment and development of commercial banks and financial institutions in Nepal. Moreover, the reform in 2000s resulted in the significant growth of banks and financial institutions. Although the number of financial institutions has increased rapidly, the level of access to finance has not enhanced throughout the nation uniformly. Most of the financial activities are centered in urban areas like Kathmandu Valley and other major cities. The increase in the number of branches of banks and financial institutions causes the increase in total assets, deposit and lending in the whole financial system and consequently the contributing the economic development of the country through mobilization of funds and utilization of its funds to increase the aggregated demand in the economy. The study will focuses on the following research questions:

- Does the growth in the number of banks and financial institutions contribute to increase in the access to finance in Nepal?
- Has that growth in number of banks and financial institutions increased the financial services outreach in rural areas too?

- Is there causal link between financial development and economic growth in Nepal?
- What are the impacts of the financial development in the economic growth of Nepal?

1.3 Objectives of the Study

The major objective of the study is to examine the relationship between financial development and economic growth. The following are the specific objectives of the study:

i. To examine the depth of the financial system and access of the financial services,

ii. To find the causal link between financial development and economic growth in Nepal,

iii. To analyze the impact of financial development in economics growth in Nepal, and

iv. To provide possible policy recommendations related with Nepalese financial system and its contribution to the economic development.

1.4 Significance of the Study

The study has examined the growth of financial sectors and access to finance in the Nepalese economy. Moreover, it also analyzes the role of the financial sector in supporting growth in the economy. Financial sector mobilizes the resources for most productive uses, and supports growth through better income distribution and addressing poverty. In the context that Nepal has already adopted the policy of liberalization, it is important to assess the impact of such financial sector development on growth in the Nepalese economy. Measuring the depth and access to finance itself is a major concern for policy makers as well as researchers. Analysis of information and the findings made in such issues shall add the literature for policy recommendation and future researches as well. It is expected that the findings and recommendations of the study will be useful for the policy makers and for further studies also.

1.5 Limitations of the Study

This research study also has some limitations:-

i. This study attempts to cover most of the activities of Nepalese financial sector. This study covers the period from FY 2000 to 2016 that helps to conduct empirical analysis.

ii. The source of data is secondary. Hence, any errors in the key information like data and other sources might affect the accuracy of the outcome of the study.

1.6 Organization of the Study

This research has been organized in the five chapters:

Chapter I: Introduction: The first chapter deals with introduction. This includes background of the study, statement of the problem, objectives of the study, significance of the study, limitations of the study.

Chapter II: Review of Literature: The second chapter presents review of available literature.

Chapter III: Research Methodology: The third chapter explains the research methodology used in the study, which includes research design, nature sources of data and samples, methods of data collection and analysis.

Chapter IV: Presentation and Analysis of Data: The fourth chapter presents the results from the analysis of data collected from different sources.

Chapter V: Summary, Conclusion and Recommendations: The fifth chapter presents the summary, conclusion and recommendations.

CHAPTER-II

REVIEW OF LITERATURE

This chapter deals with review of various previous studies associated with financial sector development, access to finance and the role of finance in growth in Nepal. The review of literature incorporates different sources like books, documents, bulletins, reports, journals and articles etc. are consulted. The first section presents a conceptual framework of the study. Second section consists of an in-depth review of related studies related with the topic of the study. This section also deals with a brief review of different research work in the context of Nepal.

2.1 Conceptual Framework

Financial system comprises financial institutions, financial instruments and financial markets in the economy. Financial market plays a role of joining suppliers of funds and fund borrowers through financial intermediaries directly or indirectly. These intermediaries channelize nation's savings into most productive uses. Financial market in functional perspective is a rational system of collecting savings and allocating them efficiently to the ultimate users for investment in productive assets or current consumption (Kidwell & Peterson; 1981). Likewise, Mishkin (1992) asserts that financial market is the arrangement that helps to allocate resources efficiently.

As early as 1911, Joseph Schumpeter claimed that the services provided by financial intermediaries form an element of economic development through channeling the society's funds to the most innovative entrepreneurs (Schumpeter. 1934). Hicks (1969) argues that financial development played a crucial role in igniting industrialization in England. The industrial revolution required funds for long-term capital investment. Emergence of financial markets that traded a variety of securities encouraged savers to hold such assets, and these availed liquid funds for long-term investment. "The industrial revolution may not have occurred without this liquidity transformation (Levine 1997)." These arguments highlight the role of the financial system in economic development. A sound financial system accelerates the economic development by facilitating intermediation, maturity transformation, credit allocation and payment system with financial discipline. 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 growth of financial services sector is theoretically important for a nation's economic growth and development. Its importance to economic growth emanates from its critical role in facilitating financial intermediation and enhancing trade related payments. The efficacy of financial system to reduce information and transaction costs plays an important role in determining the rate of savings, investment decisions, technological innovations and hence the rate of economic growth. This hypothesis has been supported by the number of studies such as McKinnon (1973); Shaw (1973); Greenwood and Jovanovic (1990) and Levine (1997). These studies share a common view that financial development is pre-requisite for the economic growth of a nation. Further, Levine (1997) states that the level of financial development is a good predictor of future rates of economic growth, capital accumulation, and technological change. He also concludes that countries with larger banks and more active stock markets grow faster over subsequent decades even after controlling for many other factors underlying economic growth.

Availability of external financing for firms depends on the wider institutional environment; lack of availability does constrain firm growth, and it is one of the more important business obstacles firms have to overcome. Access to finance contributes to firm entry, growth, and innovation, among other things. Small and new firms are affected the most by financing constraints. Yet they also benefit the most as financial systems develop and financing constraints consequently ease. Empirical evidence suggests that it is through improving access for enterprises that financial sector development makes an important contribution to economic growth (The World Bank, 2008). The access to finance and the quality and cost of the service that small businesses receive from banks are keys to their profitability and prosperity (and that of the economy). For a household, the implication of a lack of access to banking services is severe. The issue of access affects the ability of a household to receive government transfers, or to make payments or to accumulate cash surpluses for planned expenses or emergencies. Individuals who have no option but to carry cash are exposed to security risks. The lack of a vehicle for saving may result in low-income households resorting to expensive short-term debt.

Financial inclusion or inclusive financing is the delivery of financial services at affordable costs to sections of disadvantaged and low income segments of society. Unrestrained access to public goods and services is the sine qua non of an open and efficient society. It is argued that as banking services are in the nature of public good, it is essential that availability of banking and payment services to the entire population without discrimination is the prime objective of public policy. The term "financial inclusion" has gained importance since the early 2000s, and is a result of findings about financial exclusion and its direct correlation to poverty. Financial inclusion is now a common objective for many central banks among the developing nations.

Financial inclusion includes accessing of financial products and services such as savings facility, credit and debit cards, overdraft facility, cheque, payment and remittances etc. It is important to distinguish between access to—the possibility to use—and actual use of financial services. Exclusion can be voluntary, where a person or business has access to services but no need to use them, or involuntary, where price barriers or discrimination, for example, bar access. Failure to make this distinction can complicate efforts to define and measure access. Without inclusive financial systems, these individuals and enterprises with promising opportunities are limited to their own savings and earnings. This access dimension of financial development has often been overlooked, mostly because of serious data gaps on who has access to which financial services and a lack of systematic information on the barriers to broader access (The World Bank, 2008).

It is difficult to define and measure because access has many dimensions. Financial depth (total loan outstanding/GDP), more generally, can be broad indicator with direct and indirect effects on small firms. Greater depth is likely to be associated with greater access for firms, which will make them better able to take advantage of investment opportunities.

2.2 Brief Overview of Nepalese Banking System

The history of financial system of Nepal was begun in 1937 with the establishment of the Nepal Bank Ltd. as the first commercial bank of Nepal with the joint ownership of government and general public. Nepal Rastra Bank was established after 19 years since the establishment of the first commercial bank. A decade after the establishment of NRB, Rastriya Banijya Bank, a commercial bank under the ownership of Government Nepal was established. In the context of banking development, the 1980s saw a major structural change in financial sector policies, regulations and institutional developments. Government emphasized the role of the private sector for the investment in the financial sector. With the adoption of the financial sector liberalization by the government in 80's opened the door for foreign Banks to open Joint venture Banks in Nepal. As a result, various banking and non-banking financial institutions have come into existence. Nabil Bank Limited, the first foreign joint venture bank of Nepal, started operations in July 1984. During two decades, Nepal witnessed tremendous increment in number of financial institutions. Nepalese banking system has now a wide geographic reach and institutional diversification.

Consequently, by the end of mid – July 2016, altogether 209 banks and non- bank financial institutions licensed by NRB are in operation. Out of them, 28 are “A” class commercial banks, 57 “B” class development banks, 36 “C” class finance companies, 48 “D” class micro-credit development banks, 15 saving and credit co-operatives and 25 FNGOs.

Financial institutions are governed by the financial sector related laws and policies. Primarily, the acts governing the banking system are the Nepal Rastra Bank Act 2058, and Bank and Financial Institutions Act 2063. Under these laws, there are various bylaws and directives issued by Nepal Rastra Bank for the smooth running of the financial system. Currently, Unified Directives 2073 is a major policy related directives governing all the banks and other financial institutions.

As per the directives, the commercial banks perform variety functions of general banking. Primarily, the banks accepts deposit, advance loans, clearing of cheques, finance foreign trade, remittance of funds. Likewise, in the secondary function, the banks provide agency services and general utility services.

2.3 Review of Related Studies

The large number of dataset on indicators of financial development has been developed by the World Bank. Global Financial Development Database of the World Bank (2016) consists of the data of 220 countries for more than 112 indicators related to financial sector development across countries for time period beginning from 1960. It tries to incorporate the data on access to financial services, the depth of the financial system, stability and efficiency of the financial sector.

There are thousands of literatures covering the role of finance on economic growth. The first literature explaining such finance-growth nexus is the Levine (2005), who concludes that both financial intermediaries and markets matter for growth and that reverse causality alone is not driving this relationship. Gregorio and Guidotti (1995) find a positive effect of financial development on the long-run growth of real per capita GDP. Their findings suggest that the effect of financial intermediation on growth is due mainly to its impact on the efficiency of investment, rather than its volume. They find that only one-fourth of the effect of financial development on growth is channeled through the volume of investment; and the rest three-fourth explained by an improved efficiency of investment.

Kafle (1990) has analyzed the process of monetary and financial sector reform in Nepal by dividing the two broad periods: (i) before and (ii) after the implementation of the Structural Adjustment Program in 1987.

Reforms before the implementation of the SAP were categorized as:

1. Interest rate reform,
2. Exchange rate reform,
3. Entry of the joint venture banks, and
4. Branches of Agricultural Development Bank allowed for commercial banking activities.

The main objectives of the monetary and financial sector reforms under the structural adjustment program were:

1. To increase the mobilization of domestic resources,
2. To improve the utilization of foreign aid, and
3. To promote a more efficient allocation of resources.

A comprehensive set monetary and financial sector reforms under the SAP in co-ordination with other macro-economic policies were aimed to contribute on the acceleration of the pace of economic development. Monetary and financial sector reform measures have been implemented to maintain external as well as internal stability of the economy and to correct structural constraints for improving allocative efficiency of the economy.

Pant (2036) found the positive and significant relationship between banking development and overall economic growth of Nepal. The study further reveals that number of commercial bank branches help in increasing the level of monetization. To conclude the above findings, she used the data from 1965 to 1977. The study incorporates the financial development indicators as the commercial banks' branches, Agricultural Development

Bank's credit and Nepal Industrial Development Corporation credit to industrial sector. However, data series were not sufficient to generalize the findings and that period was an early stage of financial development.

Poudyal (2043) found that financial development had beneficial effect on economic growth in Nepal. Using half-yearly data derived by using newton's formulate of interpolation method from 1975 to 1985, he found high real interest rate as determinants of high rate of savings and thus investments. He used aggregate real savings as the financial development proxy and industrial production index as economic growth variable. But his study is not successful to spell clearly which channel is impressive on economic growth or financial development. And the research methodology was not concrete.

Paudel (2005) analyzed the relationship between financial system and economic growth and found positive relationship between them. The study showed that the liquid liabilities of financial system measured by the monetary aggregates such as narrow money and broad money are found to be more powerful in predicting economic growth. Monetary aggregates and bank credit were used as financial development indicators and growth of real gross domestic product, nominal GDP, per capita real GDP and per capita nominal GDP as economic growth variables. More specifically, narrow money had strong predictive power in explaining the rate of economic growth in nominal terms. But this study is also not sufficient to validate the theoretical base of financial development and economic growth hypothesis. Though the study was basically done by ordinary least square (OLS), unit root test (to find out the stationarity of data), co-integration test was not done. In the absence of these analyses, regression results could be spurious. And no attempt had been made to find the causal relationship between variables. The study is silence on serial correlation (autocorrelation) which is the basic phenomena of time series data of short period like 30 years.

Sing (2006) took secondary data of 7 years and used different tools and regression analysis as a major tool of analysis. His main objective was to analyze the overall situation of resource utilization and case of profitability of the bank. He concluded that bank was found inefficient in deposit utilization during the study period. Branch expansion in rural areas was not satisfactory. There was higher degree positive co-relation between expansion and collection of scattered savings and extension of credit by bank as well. Like this, there was higher degree of positive co-relation between deposit collection and expansion of credit by bank and there was positive co-relation between interest rate and deposit collection.

Poudel (2005) examined the relationship between financial development indicators and economic growth with a view to identify some outstanding issues. The Nepalese financial system is basically bank-dominated. Capital markets and stock markets have not been developed in full scale of operations and the banking institutions, particularly the commercial banks, appear to be the major financial intermediaries in satisfying financing need of productive units of the economy. The non-bank financial institutions have not yet been developed in terms of size of the business compared to that of commercial banks. The results in this paper confirm the strong and statistically significant relationship between financial depth and economic growth using OLS.

Shrestha (1998) presented with the objectives to make an analysis of contribution of commercial bank-s lending to the gross domestic product (GDP) of Nepal. The researcher set hypothesis that there has been positive impact of lending of commercial banks to GDP. In research methodology, the researcher considered GDP as the dependent variable and various sectors of lending like agriculture, commercial, service and social sectors independent variables. A multiple regression technique had been applied to analyze the contribution. The multiple analyses had shown that all the variables except service sectors lending has positive impact on GDP. Thus, conclusion the researcher accepted the hypothesis i-e there has been positive impact by the lending of commercial banks in various sectors of economy except service sector investment.

Shrestha and Choudhary (2006) constructed the financial liberalization index for Nepal and then examine the impact of financial liberalization in economic growth in Nepal. The index is constructed by using principal components methods for the time period 1984 to 2005. They found the highest degree of liberalization in Nepal during the period 198401994. And, using autoregressive distributed lag model, they showed the positive effects of real interest rates on savings and investment in Nepal.

Bhetuwal (2007) also studied about the financial liberalization and financial development in Nepal. He argued that financial liberalization improves the functioning of financial system by increasing the availability of funds and allowing risk diversification and increased investment. He also used principal component analysis to construct financial liberalization and financial development index. He found a continuous and gradual process of financial liberalization and showed the bi-directional causal relationship between the liberalization of financial system and the financial sector development in Nepal.

Kharel and Pokhrel (2012) investigated the role of financial structure in economic growth in Nepal using the data for the period 1994-2014. They employed Johansen's co-integration test and Vector Error Correction Approach to examine the relationship between financial development and growth in Nepal. They found that the banking sector play a key role in promoting economic growth relative to the capital market. They recommend that the policy should be focused on the banking sector development by enhancing its quality and outreach to promote economic growth in Nepal.

Timilsina (2014) also examined the impact of bank credit on economic growth in Nepal using time series data for the period 1975-2014. The study also relies on the Co-integration and Error correction approach to examine the dynamics between the financial development and economic growth. The study also found the positive effect of bank credit on the economic growth in the long run. It also indicated the feedback effect from economic growth to the financial sector in the short run.

Gautam (2015) examined the relationship between financial development and economic growth using data 1974-2015. He uses co-integration and Vector Error Correction Approach in order to examine the relationship between the financial development and economic growth. He showed that the financial development causes economic growth in Nepal both in the short run and long run. The study recommends the reform programs in the financial sector to consolidate and improve the efficiency and effectiveness of the financial system as well as to cope with the emerging changes.

2.4 Efforts for Enhancing Access to Financial Services in Nepal

The Nepal Rastra Bank (NRB) under the "Priority Sector Loan Program" (Prathmikta Chhetra Karja Karyakram) directed the commercial banks to provide institutional loans to the Priority Sector in April 1974.

Accordingly, they were required to disburse five percent of their total deposit as loans to this sector such as agriculture, cottage industry and services (Shrestha 2009).

In 1975, Agriculture Development Bank/Nepal (ADB/N), started Small Farmer's Development Program (SFDP) on a pilot basis in two Village Development Committees (VDCs) of the two districts, one in the hill and the other in Tarai. The success of this pilot testing prompted the then government to expand it to all over the country. The number of Sub-Project Offices (SPOs) reached 422 covering 652 Village Development Committees (VDCs) by December 19966. Now, the SPOs are in the process of transformation into Small farmers Cooperative Limited (SFCLs). Sana Kisan Bikas Bank Limited (SKBBL) has also been established in 2002 to provide wholesale loans to the SFCLs. Thus far, 228 SFCLs have been formed with 139,368 members and 111,494 borrowers. As of April 2009 a savings amount of Rs. 916.18 million has been mobilized, a cumulative loan of Rs. 4,702.80 million disbursed to the ultimate clients (group members), out of which Rs. 3,898.51 million have been recovered leaving Rs. 804.29 million as outstanding. The overdue amount stood at Rs. 21.36 million and the overdue rate at 2.65%. (Economic Servey, 2016)

The Government of Nepal (GoN) and the central bank introduced Grameen Bank (GB) approach of Bangladesh by establishing two GBBs, one in the Far-Western Development Region and another in the Eastern Development Region in the year 1992. Soon after 3 more GBBs were also established one each in the remaining three development regions. Five private GB-model replicating banks and several Financial Intermediary Non-Government Organizations (FI-NGOs), and Savings and Credit Cooperative Societies (SCCSs) also came into existence following the GB approach which enhanced the accessibility of the poor to the microfinance services at their doorstep. The group members understand the problems and capabilities of all members, and the Loan Officer, who goes to provide service at the doorstep, also gets an opportunity to closely assess the reality of the local situations. Both these factors help to effectively use the loan funds provided to the group members and a system of close monitoring for productive use of loans is also made possible by the decisions of the group together with the Loan Officer. The total coverage of members and borrowers by the 60 principal MFIs following GB approach stand at 842,205 and 655,536, respectively in July 2008. The cumulative loan disbursement has reached Rs. 41,508.50 million, loan recovery Rs. 35,061.97 million and the outstanding Rs. 6,446.53 million. The total overdue loan stood at Rs. 264.75 million generating an overdue rate of 4.10% on average. The total savings mobilized by July 2008 stood at Rs. 2,229.24 million (34.58% of loan outstanding). (NRB, 2016)

Since early 1990s, the government of Nepal (GoN) and the Nepal Rastra Bank (the Central Bank of Nepal) have been initiating a number of measures to ensure that supply of credit is made adequately to the targeted families on time and with easy terms and conditions. GoN also made provisions for wholesale lending to the MFIs. The Rural Self Reliance Fund (RSRF) was also established in 1991 to make small wholesale funds available to start up MFIs and another wholesale institution the Rural Microfinance Development Centre Ltd. (RMDC) was established in 1998 to extend larger wholesale funds to MFIs. Since then, RMDC has been playing a major role in the institutional development of MFIs. It has promoted more than 50 MFIs from the scratch and helped them develop the microcredit market. RMDC is focusing more on quality services and sustainability of its partner organizations (POs). It has also has been effortful to persuade its POs to extend their services to remote areas.

In 1982, the government also launched a women focused microfinance program (PCRW) – 'Production Credit for Rural Women through the Women Development Section of the Ministry of Local Development with the support of the government owned commercial banks for credit, which has outreached 82,416 women. Similarly, the government has been making provision of credit component in several donor assisted rural development projects also for supporting self-employment, promotion and income earning activities. These projects include Participatory District Development Program (PDDP), Poverty Alleviation Fund (PAF), Decentralized Local Governance Support Program (DLGSP) and many others which had followed the Self- Help Group (SHG)/Community Organization (CO) model of micro financing.

In order to enhance financial access, Nepal Rastra Bank has announced some policy measures through its monetary policy documents. In addition, NRB has been implementing financial literacy program to enhance access to finance. And, the Microfinance Department of NRB is working under various programs to enhance financial access. Likewise, there are many programs in deprived sector lending in order enhance financial access.

CHAPTER-III

RESEARCH METHODOLOGY

This chapter explains the methodology used in the study, which focuses on the research design, nature and sources of data, sample size, econometric model and estimation procedure.

3.1 Research Design

The study is based on the descriptive and analytical research design in order to meet the objectives of the study. While analyzing the relation between financial development and economic growth Nepal, related information are collected, tabulated and analyzed by using various statistical tools. The study has focused on previous relevant studies in Nepal and other countries to assess the access to financial services, financial development and economic growth. In addition, the study employed analytical design in order to explore the relationship between the financial development and economic growth in Nepal.

3.2 Nature and Sources of Data

The nature of data is descriptive as well as analytical. The sources of data are Annual Reports, Quarterly Economic Bulletin, and various issues of Banking and Financial Statistics of Nepal Rastra Bank as well as the various issues of Economic Survey published by Ministry of Finance, GoN.

3.3 Data and their features

This study has employed the secondary data on Nepalese macroeconomic variables for the period FY 1975 to FY 2015 for empirical analysis. Data include the real GDP per capita growth, remittances, broad money (M2), domestic credit private sector, nominal GDP, total assets of the commercial banks and trade. The indicator of economic activity is gross domestic product. And, financial development is represented by the credit to the private sector and broad money. All the collected data and information have been properly arranged, synthesized, tabulated and calculated as per the need of the study.

Table 3.1: List of Variables under Study

Variables	Descriptions	Sources
GDP	Gross domestic product	Economic Survey
PGDP	Per capita GDP	Economic Survey
M2	Broad money	Quarterly Economic Bulletin
CPS	Private sector credit	Quarterly Economic Bulletin
M2/GDP	The ratio of broad money to GDP. It is an indicator of financial development.	
CPS/GDP	The ratio of credit to private sector to GDP. It is also an indicator of financial development.	

3.4 Empirical Strategy for Examining Finance-Growth Relation

The first step in examining the relation between finance-growth relation is the use of simple correlation analysis. After the correlation analysis, time series properties of the variables under study have been examined. In the case of time series variables, there is possibility that the mean and variance of the variables may change if sample span increases. The variables which have changes in mean and variances are said to have unit root. In other words, such variables are called said to non-stationary. Thus, unit root properties of the data series on gross domestic product and financial development indicators have been examined using Augmented Dickey Fuller test.

If the variables are non-stationary, then one possibility is that such variables may have long-run relationship. In other words, such variables may be co-integrated. In order to examine the co-integration relation, Engle-Granger test has been used. In order to test such relation, the econometric model used to estimate the association between the financial development and economic growth is:

$$GDP_{gt} = \beta_0 + \beta 1 FD_t + u_t \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \text{(1)}$$

Model (1) is estimated using ordinary least squares methods. And, then the residulas of (1) are estimated. Then, the Engle-Granger test requires the testing of unit root of the residuals. If the residual series is stationary, then there exist the co-integration between financial development and economic growth.

If the variables are co-integrated, we can simply examine the relation between financial development indicators and economic growth using Granger causality analysis. This test also gives the short run relationship between variables. The Granger Causality Test, which depends on the time series data, is made by the estimation of the equations below with the OLS method:

$$FD_t = \sum \beta_j FD_{t-j} + \sum \delta_j GDP_{t-j} + u_t \ldots\ldots\ldots\ldots\ldots\text{(2)}$$
$$GDP_t = \sum \alpha_j GDP_{t-j} + \sum \eta_j FD_{t-j} + u_t \ldots\ldots\ldots\ldots\ldots\ldots\text{(3)}$$

The null hypotheses to be tested are:

H_1: η_j =0, this hypothesis means that financial development does not granger cause GDP.

H_2: δ_j=0, this hypothesis means that GDP does not Granger cause financial development. If the null hypothesis is rejected, it shows that financial development Granger causes GDP. Rejection of the second hypothesis means that the causality runs from GDP to financial development. If none of the hypothesis is rejected, it means that financial development Granger cause GDP and GDP does not Granger cause financial development. If all hypotheses are rejected, there is bi-directional causality between financial development and GDP. In the Granger Causality test, there are three possible situations: one directional causality from GDP to FD or FD to GDP; opposite direction between GDP and FD or one affecting the other; and independency of GDP and FD from each other. To apply the test under null hypotheses illustrates that coefficients of financial deepening variables are meaningful (i.e. equal to zero) and that F- statistics can be calculated. The direction can be either negative or positive. Similar cases can be observed for other variables also.

CHAPTER-IV

PRESENTATION & ANALYSIS OF DATA

This chapter presented the Nepalese financial sector development, access to finance, and the relationship between financial development, remittance and economic growth based on the secondary data.

4.1 Supply Side of Financial Services in Nepal

After the implementation of financial sector reforms in 2000s, the financial sector has become deeper and there has been a significant growth of banks and financial institutions in Nepal. However, there are still issues related to the access to financial services in Nepal. This part presents and analyzes the Nepalese financial sector development during the last decades.

4.1.1 Growth of the Number of Banks and Financial Institutions

The reform implemented in 1980s and 2000s resulted in the significant growth in the number of banks and financial institutions. As presented below, by the end of mid–July 2016, there were 219 banks and financial institutions in operation. Out of them, 28 are "A" class commercial banks, 67 "B" class development banks, 42 "C" class finance companies, 42 "D" class micro-credit development banks, 15 saving and credit co-operatives and 25 NGOs. Development of financial institutions in Nepal is shown in the table below.

Table 4.1: Growth of Financial Institutions

Types of Financial Institutions	Mid-July											
	1985	**1990**	**1995**	**2000**	**2005**	**2008**	**2010**	**2012**	**2013**	**2014**	**2015**	**2016**
Commercial Banks	3	5	10	13	17	25	27	32	31	30	30	28
Development Banks	2	2	3	7	26	58	79	88	86	84	76	67
Finance Companies			21	45	60	78	79	69	59	53	48	42
Micro-finance Development Banks			4	7	11	12	18	24	31	37	38	42
Saving & Credit Co-operatives Limited Banking Activities)			6	19	20	16	15	16	15	16	15	15
NGOs (Financial Intermediaries)				7	47	46	45	36	31	30	28	25
Total	**5**	**7**	**44**	**98**	**181**	**235**	**263**	**265**	**253**	**250**	**235**	**219**

Source: Quarterly Economic Bulletin (2016, NRB)

4.1.2 Composition of Assets and liabilities of Bank and Financial Institution

As of Mid – July 2016, composition of assets/liabilities of banks and financial institution shows that, Commercial Bank group occupied 79.1 percent of total assets/liabilities followed by Development Banks 12.2 percent, Finance Companies 3.7 percent and Micro-finance Development Bank 3.5 percent. Such composition as on Mid – July 2010, the respective shares were 76.7, 10.6, 10.9 and 1.8 percent respectively. Commercial banks are the largest players in term of shares of the total banking assets, since they are holding almost three quarter of the banking sector consistently.

4.1.3 Total Assets and Capital Fund of Commercial Banks

Growth of Nepalese financial sector is not limited to the number of banks and financial institutions only. Volume of transactions and the amount of resource mobilization have also increased over the period. Increase in the total assets and capital fund of the banks and financial institutions during the last 15 years supports the argument that financial sector has grown at a rapid pace.

Table 4.2 shows that the trend of total assets and capital fund for the last 15 years. Table 4.2 shows that total asset of banking system in Nepal has increased sharply over the period of 15 years from Rs273946 million in year 2001 to Rs. 2254034 in the year 2015. Similarly capital fund has also increased from Rs10994 million in 2001 to Rs 169135 million in 2015. However, the increase in assets does not seem to be well supported by same level of capital increment. The overall capital level during the years 2005/6/7 were negative that is attributed to the negative capital fund of the large state owned banks during those years.

Table 4.2: Total Asset and Capital Fund (Rs. in millions)

Fiscal Year	Total Assets	Capital Fund
2001	273,946	10,994
2002	314,567	15,827
2003	357,051	20,031
2004	387,432	-1,474
2005	474,326	-9,088
2006	505,958	-7,461
2007	582,477	6,902
2008	706,324	25,778
2009	988,879	52,682
2010	1,026,595	77,264
2011	1,166,214	105,816
2012	1,380,971	117,980
2013	1,620,695	135562
2014	1,897,302	150,812
2015	2,254,034	169,135

Source: NRB, 2016

4.1.4 Deposit and Credit of Commercial Banks

Growth of Nepalese financial sector can be observed from the transaction volume of the total business of banks and financial institutions. Major business functions of the Nepalese Banks and financial institutions are deposit taking and advancing credit. The size of the deposit and credit represents the size of the business of the Banks and financial institutions. Following table shows that deposit and credit of the banks and financial institutions have increased significantly during the period from mid July 2001 to 2015.

Table 4.3: Total Deposit and Total Credit (Rs. in millions)

Mid - July	Total Deposits	Total Credit
2001	197,326	124,049
2002	205,135	148,291
2003	228,736	165,119
2004	258,742	184,389
2005	284,115	209,054
2006	327,925	230,425
2007	391,153	291,606
2008	508,906	391,538
2009	674,584	511,753
2010	788,084	620,838
2011	873,489	718,675
2012	1,076,629	807,579
2013	1,257,278	979,122
2014	1,488,834	1,154,950
2015	1,787,959	1,416,478

Source NRB, 2016

Table 4.3 shows that the total deposit and total credit of the banks and financial institutions were Rs. 197326 Million and Rs. 124049 Million respectively in 2001. Such deposits and credit were increased gradually and reached to Rs. 1787959 Million and Rs.

1416478 Million as on mid July 2015. A significant growth trend can be observed in the following figure.

4.1.5 Some Other Indicators of Commercial Banks

There are some other indicators which support to explain the financial sector developments of Nepal. In addition to the total assets, deposit, credit and capital level of commercial banks, a sharp growth can be observed in number of branches, deposit per capita, and credit per capita. Population per branch is gradually decreasing during the last decades.

Table 4.4: Some Indicators of Commercial Banks

Mid July	Number of Commercial Bank Branches	Population per Bank Branches (000)	Deposits Per capita (Rs.)	Credit Per capita (Rs.)
2001	430	53.84	7,851.71	4,713.66
2002	413	57.31	7,997.61	4,888.75
2003	447	54.14	8,806.88	5,378.94
2004	423	58.49	10,099.84	6,048.87
2005	422	59.95	10,903.23	7,072.09
2006	437	59.18	11,515.46	6,991.24
2007	470	56.26	13,344.19	9,166.23
2008	555	48.70	15,763.24	11,206.56
2009	752	36.76	20,390.90	14,404.59
2010	987	28.37	22,324.95	16,606.39
2011	1245	21.38	23,717.32	19,835.58
2012	1423	18.62	32,760.69	23,498.29
2013	1486	17.83	38,529.91	28,579.80
2014	1547	16.18	45,460.88	33,653.39
2015	1672	16.00	63,855.68	39,887.38

Source: Banking and Financial Statistics, NRB, 2016

Table 4.4 shows that there is a gradual increment in the number of bank branches, deposit per capita and credit per capita. These indicators show that the access to financial services is also increasing gradually. There were 430 branches of commercial bank in mid July 2001 which has been increased to 1672 branches as on mid July 2015. With the increase in number of branches, population per branch of commercial banks came down to 16 thousand in mid July 2015, which were 53.8 thousands in 2001. Similarly, deposit and credit per capita have been increased to Rs. 63855 and Rs. 39887 respectively in 2015 from Rs. 7851.7 and Rs. 4713.7 respectively in 2001.

4.1.6 Depth of the Financial System

The depth of a financial system is measured by the various indicators such as broad money, credit to private sector, assets of the financial system and deposits (in terms of GDP). There was a very low depth of the financial system in 1970s, as indicated by the low ratio of broad money to GDP and the credit to GDP. For example, the broad money to GDP was 12.5 percent and the credit to private sector to GDP was 4.7 percent. Such depth increased to 30.5 percent in 1990, 49 percent in 2000 and 60.3 percent in 2010. Finally, broad money to GDP increased to 99.8 percent in 2016. Likewise, the credit to the private sector as a percent of GDP increased from 4.7 percent in 1975 to 28.8 percent 2000 and reached to 75.3 percent in 2016. The evolution of the depth of the financial sector is shown in Figure 4.1.

Figure 4.1: Depth of the Nepalese Financial System

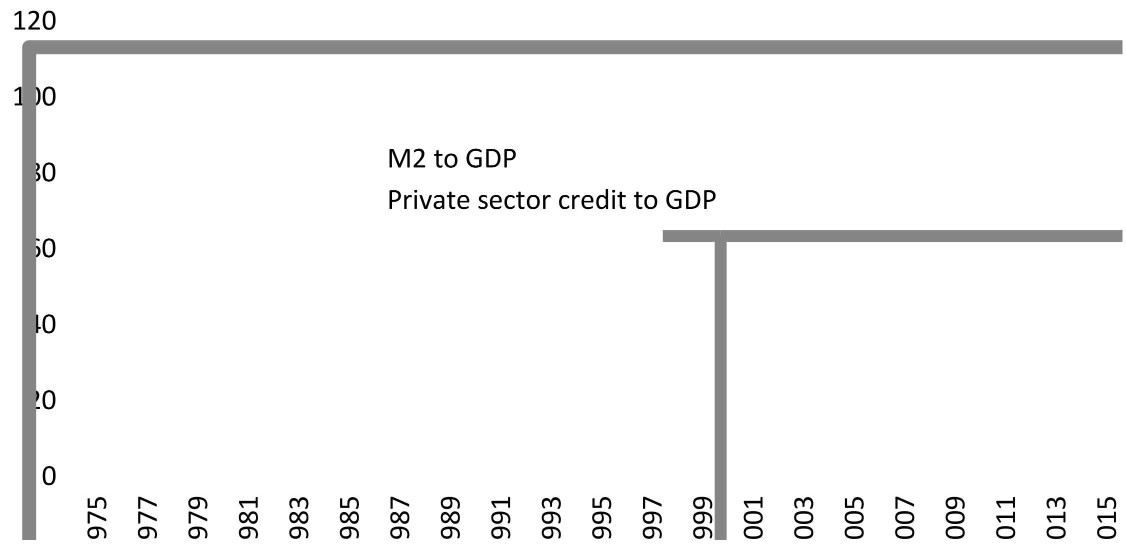
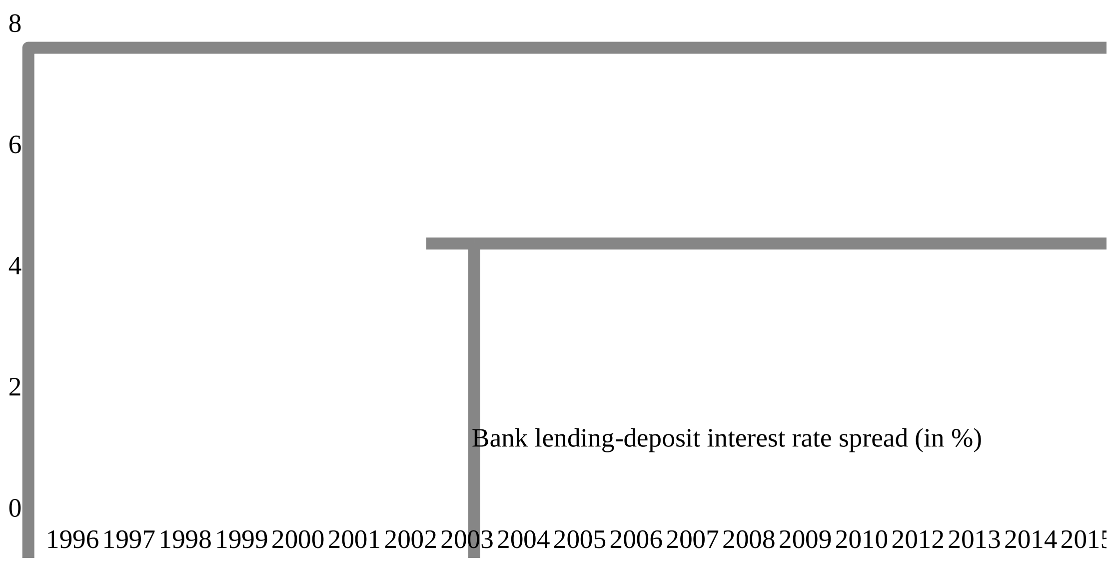


Figure 4.2: Evolution of Interest Rate Spread



4.1.7 Efficiency of the Financial System

The efficiency of a financial system is measured by various indicators related to banks and capital market. One of the main indicators of efficiency is the interest rate spread on bank lending and deposits. In general, higher interest rate spread implies higher level of inefficiency. Figure 4.2 shows the evolution of interest rate spread in Nepal. The interest rate spread was low in 2000s, but it has increased to higher level of more than 5 percent since 2012. It indicates the increased inefficiency of the Nepalese banking system. But, the Nepalese banking system has adopted modern technologies. One reason for such increased spread is due to the high net interest margin in order to maintain monopoly profit. Monopoly power is itself an indicator of inefficiency.

4.1.8 Access to Finance

Table 4.3 shows that total number of branches of commercial banks, development banks and finance companies was 2896 at the end of July 2016. On the basis of this, population per branch of banks or financial institutions comes to be 9684. There are highest number of total branches in Bagmati zone (872) and lowest number of total branches in Karnali zone. The table shows that population per branch in Bagmati is 4771 while such population per branch is 24457 in Karnali zone. It implies that the banking activities are concentrated in the zones like Bagmati, Gandaki, Narayani, and Koshi.

Figure 4.3: Population per Branches per 100, 000 Aadults

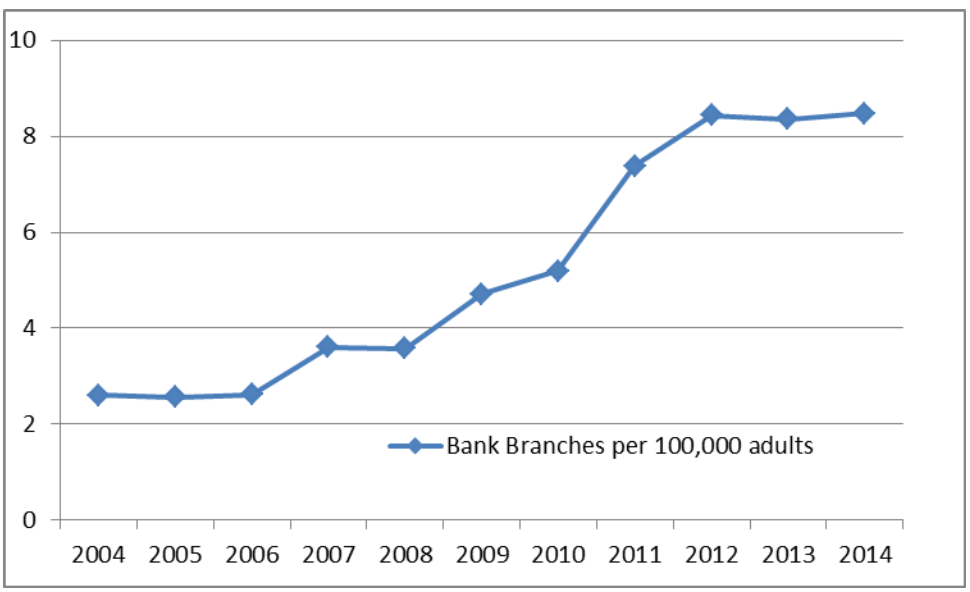


Table 4.5: Zone Wise Distribution of Branches of Banks and Financial Institutions

Zone	Commercial Bank	Development Bank	Finance Company	Total Branches	Population per Branch
Mechi	95	35	7	137	10857
Koshi	170	60	12	242	10125
Sagarmatha	82	9	6	97	21874
Janakpur	96	43	5	144	20693
Narayani	174	110	17	301	10719
Bagmati	618	171	83	872	4771
Gandaki	138	142	11	291	5429
Lumbini	171	140	21	332	8994
Dhaulagiri	41	29	3	73	7522
Rapti	68	41	6	115	13344
Karnali	16	1	0	17	24457
Bheri	89	41	3	133	13790
Seti	67	18	1	86	19620
Mahakali	44	12	0	56	18428
Total	**1869**	**852**	**175**	**2896**	9684

Source: Banking and Financial statistics, NRB, 2016

Kathmandu has the total number of branches of 555 which is highest in number among 75 districts. Kaski, Rupandehi, Chitwan and Lalitpur are other highest in terms of number of branches of 156, 172, 146 and 116 respectively. On the basis of these numbers of branches, population per branch in Kathmandu, Kaski, Rupandehi, Chitawan and lalitpur were 3529, 3419, 5595, 4324 and 4429 respectively. These are the top 5 districts in terms of number of branches in operations.

On the other hand, Bajhang, Bajura, Darchula, Dolpa and Jajarkot are the districts having lowest number of branches of banks and financial institutions. Each of the districts has 2 to 3 branches of commercial banks. Population per branch in Bajura is 72026 which is highest in number among 75 districts. Population per branch in Bajhang, Kalikot, jajarkot and Baitadi have 51782, 48962, 45840 and 43032 respectively.

Table 4.6: District Wise Branches Top 5 and Bottom 5 Districts

District	Commercial Bank	Development Bank	Finance Company	Total branches	Population per branch	Position
Kathmandu	404	92	59	555	3529	Top 5
Kaski	65	82	9	156	3419	
Rupandehi	89	72	11	172	5595	
Chitawan	68	70	8	146	4324	
Lalitpur	87	16	13	116	4429	
Dolpa	3	0	0	3	13069	Bottom 5
Mugu	2	0	0	2	29572	
Humla	3	0	0	3	18127	
Kalikot	3	0	0	3	48962	
Manang	2	1	0	3	2154	

Source: Banking and Financial Statistics, NRB, 2016

4.1.13: Other Indicators at Glance

There are some other indicators which explain the access to finance in Nepal. At the end of July 2016, total number of Automated Teller Machine (ATM) was 1908. Similarly, number of debit card and credit card issued by the banks are 4657125 and 52014 respectively. Number of deposit account and number of loan accounts were 16836017 and 1096570 respectively.

Table 4.7: Selected Indicators of Financial Access

S.N.	Particulars	Commercial Banks	Development Banks	Finance Companies	Total
1	No. of ATM	1661	230	17	1908
2	No. of Debit Card	4142390	479318	35417	4657125
3	No. of Credit Card	52014	-	-	52014
4	No. of Deposit Accounts	13010175	3302162	523680	16836017
5	No. of Loan Accounts	753636	303934	39000	1096570
6	No of Bank Branches	1869	852	175	2896

Source: Banking and Financial Statistics, NRB.

4.2 Demands for Access to Financial Services

Nepal Living Standard survey, 2010/11 shows that Access to a commercial bank is rather low in the country. Only 40 percent of households in the country can reach the nearest bank within 30 minutes. For some 44 percent of households, it takes one hour and more. Similarly, only 27 percent of rural households have access to a bank which is extremely lower than the percentage of urban households (89 percent) with the same facility within 30 minutes of time.

There is much disparity among the ecological belts regarding the percentage of households having access to a bank. Terai region has the highest percentage of households (75 percent) having access to this facility within one hour time whereas the same percentages for the hills and the mountains are 45 and 17 respectively.

There is also much difference between mean time taken to reach the nearest bank between urban and rural households. The mean time taken for rural households i.e.135

minutes is about eight times higher than the time taken for urban households i.e.16 minutes.

World Bank (2006) study “Access to Financial Services” presents, only 26 percent of Nepalese households have a bank account, and banks’ procedures are perceived as being the most cumbersome among financial institutions. Accordingly, clients prefer not to save in them. Banks dominated in urban areas and among the wealthiest. About 38 percent of Nepalese households have an outstanding loan exclusively from the informal sector, 16 percent from both the informal and formal sector, and 15 percent from only the formal sector (that is, a bank, finance company, financial NGO or cooperative, or microfinance or rural regional development bank). Family and friends are by far the largest informal providers of loans to households—and, contrary to common belief, family and friends often charge interest. Most households who borrow from informal providers do not bother trying to borrow from financial institutions, mainly because formal institutions cannot meet their financial needs on time.

Access to financial services in Nepal is particularly hard in rural areas or areas with limited infrastructure. Institutions have struggled to extend financial services beyond some populated areas especially in rural Nepal as building a physical network of branches is costly. Transportation costs, opportunity costs and lack of financial providers remain major impediments to access financial service for many people in rural areas, some have to walk for hours to access a branch. Therefore, households are still very much dependent on loans from relatives, friends and neighbors. In effect 51% of households rely on friends and family to meet their loan needs, compared to 41% in 1995/96 (NLSS, 2010/11).

Despite these challenges, a set of policies instituted by the government has significantly improved access to finance. The portion of households taking loans from formal financial institution such as banks has increased from 16% in 1995/96 to 20% in 2010/2011.

The use of costly and informal sources, such as moneylenders has decreased from 40% in 1995/96 to 15% in 2010/2011 (NLSS, 2010/11). These are significant achievements; however majority of the poor is still without access to finance.

Due to the favorable policies, Nepal's financial sector has grown rapidly over the past two decades, increasing the number of financial institutions from only two in 1980 to more than 272 in 2011. Despite the expansion of retail providers, the microfinance sector in Nepal has yet to meet the growing needs of low income households, especially in rural areas. However, as roads and telecommunications begin to link previously isolated areas to the national economy, opportunities, goods and services, including financial services, follow. Nevertheless, high costs of obtaining basic infrastructure services, such as energy, appear to impose significant constraints to enterprise development and thus limit demand for financial services (Nepal Rastra Bank's Enhancing Access to Financial Services Project, 2012).

4.3 Financial Development and Economic Development

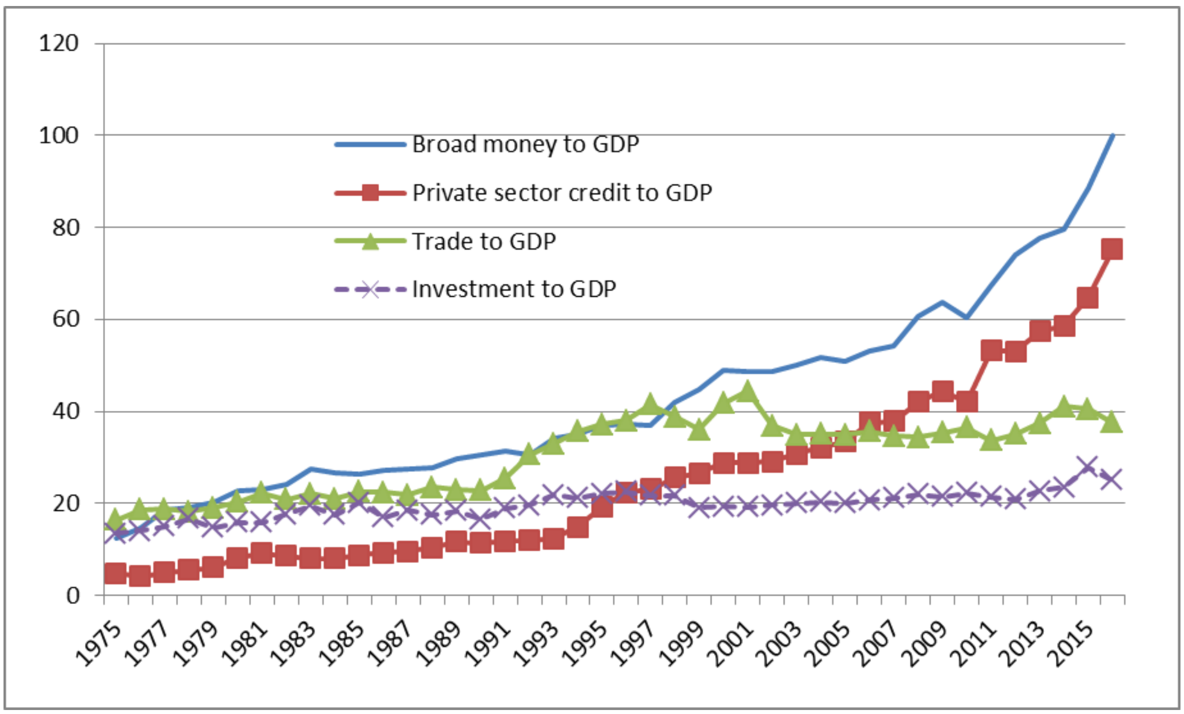
4.3.1 Trend of Investment, Financial Development and Trade

Figure 4.5 shows that the trends of macroeconomic variables that are expressed in percentage of GDP. Graphical analysis shows that investment measured as a ratio of gross fixed capital formation to nominal GDP has been constant around only 20 % and is decreasing after 2008.

Trade openness measured as the ratio of sum of exports and imports to nominal GDP has been also fluctuating around 34 percent to 39 percent. Due to several socio-economic and political constraints, the trend of workers going foreign employment is increasing year after year and, thus, remittance inflow has been also increasing. Remittance as a percentage of GDP was 10.69 percent in FY 2000/01, and which reached to 21.22 percent in FY 2008/09. Later, remittance inflow declined to 18.8 percent in FY 2010/11. Excessive inflow of remittance in 2008/09 was due to appreciation of US dollar. Financial development variables also show the increasing trend. M2/GDP Ratio was

48.57 percent in FY 2000/01 and reached to 58.53 percent in FY 2010/11. It was highest 63.81 percent in FY 2008/09, which may be due to excessive increase in remittance inflow and corresponding increase in money supply. Similarly, another proxy for financial development i.e. total bank deposit liabilities to GDP has also increased from 36.70 percent in FY 2000/01 to 46.25 percent in FY 2010/11. It also exhibited the highest trend in FY 2008/09 as M2/GDP ratio. The ratio of credit to private sector to GDP also interpreted as financial deepening increased from 31.92 percent in FY 2000/01 to 54.24 percent in FY 2010/11.

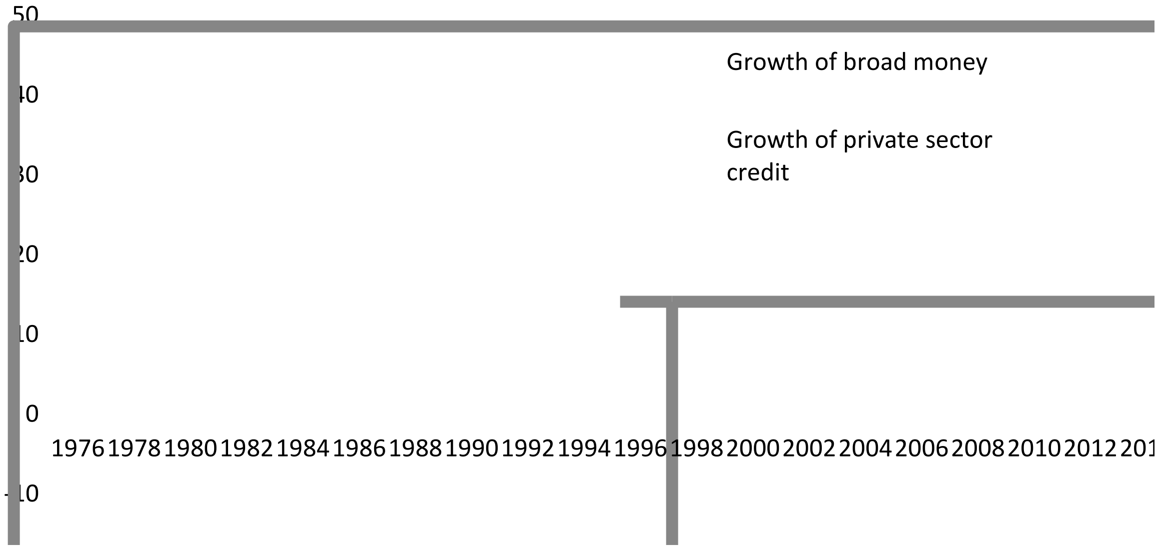
Figure 4.4: Financial Depth, Trade and Investment (in percent of GDP)



Source: Economic Survey, 2011 and Quarterly Economic Bulletin, NRB (2016).

Figure 4.7 shows that the trend of nominal GDP, investment, remittance, exports and imports in absolute value. All of the variables show the rapidly increasing trend in nominal value except exports.

Figure 4.5 : Growth of Broad Money and Private Sector Credit



Source: Quarterly Economic Bulletin.

4.3.2 Empirical Results for the Finance-Growth Nexus in Nepal

The relationship between the financial development and economic development is crucial one since financial sector can stimulate economic growth through many channels like raising private savings rate and raising marginal productivity of capital while rapid economic growth also causes the rise in the demand for financial services and expansion of the financial sector. In this kind of mutual relationship, this study simply tries to estimate the impact of financial development on economic growth using the time series methods based on the annual data from 1975 to 2016.

Table 4.8: Correlation between GDP, M2 and CPS.

	GDP	M2	CPS
GDP	1.00 (0.00)		
M2	0.99 (0.00)	1.00 (0.00)	
CPS	0.99 (0.00)	0.99 (0.00)	1.00 (0.00)

*The figures in parenthesis are the p-values.

The first step is to examine the cross-correlation between the indicators of growth and financial sectors development. Table 4.8 shows the correlation between gross domestic product (GDP), broad money (M2) and credit to private sector (CPS). There is high positive correlation between indicators of financial development and GDP, indicating the association between growth and financial development. But, such correlation shows only the association but no indication of causality.

It is important to examine the time series properties of data. Thus, the first task is to check the stationarity of time series variables. Time series variables may be non-stationary which results in spurious regression. Non-stationarity implies that the mean and variance of the variables changes when sample size increases, that is, time increases. The non-stationarity of the variables is examined by using Augmented-Dickey Fuller (ADF) test. Table 4.9 shows the results of ADF test. Broad money (M2), credit to the private sector (CPS) and gross domestic product (GDP) are non-stationary at the level, but stationary at the first difference. Per capita GDP (PGDP) and the ratio of private sector credit to GDP (CPS/GDP) are non-stationary in first difference too. And, the ratio of broad money to GDP (M2/GDP) is stationary at first difference.

One of the important properties of time series data is to examine the long-run equilibrium relationship between the variables. Such long-term relation between variables is examined through the co-integration test. If the variables are co-integrated, then it implies that additional information can be extracted from the linear combination of these variables. The single-equation based co-integration has been used to estimate the relationship between the variables. The null hypothesis of no co-integration is rejected at 10 percent significance level. Thus, there is long-run relationship between gross domestic product (GDP) and broad money (M2) as well as between gross domestic product (GDP) and the claims on the private sector (CPS).

Table 4.9: ADF Test Results

Variables	Level	First Difference
M2	-0.57 (0.87)	-4.48 (0.00)
CPS	0.04 (0.96)	-5.94 (0.00)
GDP	-0.02 (0.95)	7.61 (0.00)
PGDP	-0.86 (0.78)	-0.54 (0.87)
M2/GDP	3.53 (1.00)	-3.78 (0.00)
CPS/GDP	4.43 (1.00)	0.37 (0.97)

*The values in parenthesis are p-values.

Table 4.10: Results of Engle-Granger Co-integration Test

Null-hypothesis	**Engle-Granger Tau-statistics**	**Results**
No co-integration between GDP and M2	-3.52 (0.05)	Reject null hypothesis. There is co-integration between GDP and M2.
No co-integration between CPS and M2	-3.28 (0.08)	Reject null hypothesis. There is co-integration between GDP and CPS.

*The figures in parenthesis are p-values.

The next step is to examine the causality between financial development and economic growth. For this purpose, the Granger causality test has been used. For this, the proxies for financial development are the broad money (M2) and the credit to the private sector

(PC) both in level terms and ratio in terms of GDP. And, the proxies for economic development are the gross domestic product and per capita GDP. Since the Granger Causality analysis is sensitive to lag, the lags are chosen based on the SBC criteria of in vector auto-regression.

Table 4.11: Granger Causality Results

Causality Direction	Chi-square Statistics	Lag	Results
M2 ⟶ GDP	113.77 (0.00)	3	Reject the Null hypothesis. Thus, M2 Granger causes the GDP.
GDP ⟶ M2	0.65 (0.88)	3	Null hypothesis cannot be rejected. Thus, GDP does not Granger causes M2.
CPS ⟶ GDP	7.20 (0.07)	3	Reject the null hypothesis at 10 percent significance level. Thus, GDP Granger causes CPS.
GDP ⟶ CPS	9.34 (0.03)	3	Reject the null hypothesis. Thus, CPS Granger causes GDP.
M2/GDP ⟶ PGDP	9.17 (0.00)	3	Reject the null hypothesis. Thus, M2/GDP Granger causes PGDP.
PGDP ⟶ M2/GDP	1.38 (0.29)	3	Null hypothesis cannot be rejected. Thus, PGDP does not Granger causes M2/GDP.
CPS/GDP ⟶ PGDP	8.35 (0.02)	1	Reject the null hypothesis. Thus, CPS/GDP Granger causes PGDP.
PGDP ⟶ CPS/GDP	0.16 (0.92)	3	Null hypothesis cannot be rejected. Thus, PGDP does not Granger causes CPS/GDP.

*The figures in parenthesis are p-values.

Table 4.11 shows that the results of Granger causality test between indicators of financial development and economic growth. It clearly implies that the causality runs from financial development to the economic growth in case of all indicators of financial development (M2, CPS, M2/GDP, CPS/GDP) at 10 percent level of significance. But, the test clearly shows that the causality does not run from economic growth to broad money. Likewise, the causality does not run from per capita GDP to M2/GDP and CPS/GDP. However, the causality runs from GDP to the CPS. Thus, we can conclude that financial development fosters economic growth in the context of Nepal, while opposite is not true implied by the model.

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Major Findings

Chapter one describes about the general introduction, objectives, problems and limitations of the study allowing first step to go through the study. In chapter II, relevant literatures as obtained from journals, books, articles and different studies have been incorporated. Chapter third is research methodology which includes plans and strategy like research design, population, sample, sources and types of data, tools to be applied etc. Chapter next to the third is data presentation and analysis.

This study has covered the period of 42 years from 1975 to 2016. Secondary data have been used in analysis process. Both analytical and descriptive approaches have been employed for the purpose of analyzing the data. In the study data for all the banks financial institutions are condensed and aggregated. In order to estimate the relationship between financial development and economic growth, Co-integration analysis and Granger causality test have been used. The analytical results can be summarized as follows:

- Number of banks and financial institution has increased to 272 in mid July 2011 from 4 in mid July 1980. Commercial banks, Development banks, finance companies and microfinance development banks are under operation during the period of study. Some cooperatives and NGOs were also given license for financial transaction but now such licensing is completely stopped.

- Not only the number of banks and financial institutions but their performance indicators like total assets, deposit, credit and capital have also increased significantly during the last decades.

- On the one hand, there was a rapid growth in number as well as performance of financial institutions (supply side). On the other side, demand for access to financial services is also increasing.

- Population per branch shows that the access to financial services is highly concentrated in urban area. As on end of July 2016, population per branch in Kathmandu was 3605 having total number of branches 483. On the other hand, population per branch in Bajhang was 98139 having total number of branches of 2 only.

- Some indicators representing access to financial services like number of branches, number of deposit accounts, number loan accounts, number of ATM and geographical distribution of branches shows that there is a very high differences among the different geographical location of the country. However such indicators are improving gradually.

- Regression results shows that the coefficients of the financial development proxies have the expected positive sign implying that financial development has the positive impacts on the economic development. But, the remittance inflow has the negative coefficients. The Granger causality test also clearly states that financial development granger cause the economic growth.

5.2 Conclusion

Supply of financial services has been increased in the past through growth and development of the financial sector. But the demand for financial services has not yet addressed sufficiently. There is still a huge gap between demand for and supply of financial services in Nepal. On the basis of review of literature, policies, regulations and analysis of data, the study has made following conclusions;

- Nepalese banks and financial institutions achieved a rapid growth in volume and complexity over the last three decades. Despite making significant growth in overall areas, there are concerns that banks and financial institutions have not been able to include vast segment of the population, especially the rural and remote area.

- Rapid growth of the banks and financial institution has brought a significant change in the quantity as well as quality of the financial services, but such changes are limited in the urban centric and city area.

- Financial sector development has contributed towards enhancing access to financial services in Nepal. With the growth of financial sector there is a rapid growth in the supply side of the financial services but still there are high demands for financial services which are to be addressed.

- Most of the financial services are concentrated in major cities and urban areas. Kathmandu is the district having largest number of branches of banks and lowest number of population per branch. On the other hand, Bajhang is the district with highest number of population per branch with least number of branches within the district. More than 70% of the banking activities (in terms of deposit and credit) are concentrated in top most 5 districts of Nepal.

5.3 Recommendations

In order to promote and enhance access to financial services in line with the development of financial sector, the study makes the following recommendations;

- To enhance access to financial services among rural and marginalized people, merely establishment of banks and financial institution is not sufficient. It requires a holistic approach including awareness raising, financial education, and technical advice on different dimensions of money management, debt counseling, saving mobilization, provision of affordable credit services, research and development.

- Financial literacy is the issue which has been given less priority in the course of enhancing access to financial services. Nepal Rastra Bank and GoN should initiate special projects on financial literacy, awareness building, research and development in this field.

- In order to promote financial inclusion, banks and financial institutions need to develop and implement the strategies to expand the outreach of their services using combinations of lending methodologies, market led approaches to new product development, fostering linkages with local communities and promoting the use of technologies.

- Provision of financial services alone is not sufficient if the banks and financial institutions do not have expert hands at work. The staffs must have professional knowledge and skills to provide quality services to the rural poor.

- Institutional set up through establishment of microfinance information center, secured transaction registry office, Microfinance research and training center is necessary prerequisite for the development of safe and sound financial system which shall contribute towards enhancing the financial services.

- The Government and NRB should focus on research and development (such as impact assessment), capacity building (creating training institute- provide support in generating funds required), recognizing and rewarding best practices (awards and prizes etc.).

- All the stakeholders should be involved in the policy formulation. Rural poor and marginalized groups should be included in the policy process so as to develop sense of belongingness and bring them into the process of financial sector development. Micro-finance summit, Nepal could be a forum to this end.

- Promotion and Development of micro-insurance policy should be exercised to promote micro- finance outreach. The risk fund and insurance funds are necessary to cover natural and physical hazards faced by user groups and financial institutions. Funds for developing infrastructure (software, training to staff) for enhancing access to financial services should created to serve in rural and hill areas.

- The legal and regulatory framework for microfinance should be simplified to reduce confusion and strengthened to increase stability. Second tier institutions (STI) should be established and promoted to regulate and supervise the financial services by removing confusion and weak supervision in this sector.

- Government and central bank should coordinate with the donor agencies to develop and promote best practices, self-regulation, performance standards, rating agencies.

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