# SOCIO-ECONOMIC IMPACT ON SOLAR HOME SYSTEM TO THE USERS IN SIPADOLE AND KATUNJE AREA, BHAKTAPUR DISTRICT 

A Thesis Submitted to Central Department of Rural Development, Tribhuvan University, in Partial Fulfillment of the Requirements for the Degree of the Master of Arts (M A)<br>In<br>Rural Development

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## ACRONYMS

| AEPC | = | Alternative Energy Promotion Center |
| :---: | :---: | :---: |
| AET | = | Alternative Energy Technology |
| CBS | = | Central Bureau of Statistics |
| CDM | = | Clean Development Mechanism |
| CRT | = | Center for Renewable Technology |
| DANIDA | = | Danish Development Agency |
| D.C | = | Direct Current |
| DDC | = | District Development Committee |
| ESAP | = | Energy Sector Assistance Program |
| GJ | = | Giga Joule |
| HHs | = | Households |
| i.e. | = | That is |
| KTOE | = | Kilo Tone Oil Equivalent |
| KW | = | Kilo Watt |
| Ltd | = | Limited |
| MJ | = | Mega Joule |
| MW | = | Mega Watt |
| NEA | = | Nepal Electricity Authority |
| NGOs | = | Non Governmental Organization |
| NPC | = | National Planning Commission |
| PV | = | Photovoltaic |
| Pvt. | = | Private |
| RECAST | = | Research Center for Applied Science and Technology |
| REDP | = | Rural Energy Development Program |
| REF | = | Rural Energy Fund |
| RET | = | Renewable Energy Technology |
| SELF | = | Solar Electric Light Fund |
| SHS | = | Solar Home System |
| SPV | = | Solar Photovoltaic |
| TV | = | Television |
| VDC | = | Village Development Committee |
| W | = | Watt |
| WECS | = | Water and Energy Commission Secretariat |
| WP | $=$ | Watt Peak |

## CHAPTER I INTRODUCTION

### 1.1 Background of the Study

Nepal is a mountainous landlocked country with an area of $1,47,181 \mathrm{sq} \mathrm{km}$. The country has total population of $2,64,94,504$ (CBS, 2011) with an annual growth rate of $1.35 \%$. About $83 \%$ of nation's population lives in rural areas, and the country is characterized by small landholding, a fragile economy (per capita GDP 740 US\$, inequality Gini Coefficient 0.328 , with poverty head count rate $25.16 \%$ ), politically in transitional phase. Nepal's energy resources are presently classified into three categories namely the traditional, commercial and alternative. Traditional energy resources include fuel wood from forests and tree resources, agricultural residues coming from agricultural crops and animal dung in the dry form. Energy resources coming under the commercial or business practices are grouped into commercial energy resources that particularly include the coal, grid electricity and petroleum products. Biogas, solar power, and micro level hydropower are categorized into the alternative energy resources in Nepal. Such resources are considered as the supplement of conventional energy resources. Total energy consumption in the year 2008/09 was about 9.3 million tons of oil equivalents ( 401 million GJ) in the country out of which $87 \%$ were derived from traditional resources, $12 \%$ from commercial sources and less than $1 \%$ from the alternative sources (MOF, 2016).

Energy is taken as one of the most important indicators of socio-economic development, and per capita energy consumption is often viewed as a key index of the development. Developed countries have significantly higher per capita energy consumption. For example, the United States has a per capita energy consumption of 314.1 GJ/year; Japan has $162.5 \mathrm{GJ} /$ year. For Nepal, the per capita total primary energy supply (TPES) is just $14.2 \mathrm{GJ} /$ year, which is far less than world's average per capita TPES of 76.6 GJ/year. Nepal though being reach in water resources possessing around economically exploitable hydropower potential of about 42,000 Megawatts (MW) is facing a severe power shortage up to 12 to 14 hours per day since last $6 / 7$ years. "Electricity is a distant dream for many families in rural area of Nepal, $63 \%$ people doesn't have access on electricity. The discrimination is even higher when it
comes to rural area, only $30 \%$ of rural people have electricity access while around $90 \%$ of urban people are connected with electricity"(AEPC, 2011). There is continuously increasing demand for electricity for households as well as for industrial and for other many purpose.

The energy consumed by sector for 2008/09 is by residential 43.4\%, Industrial $38.2 \%$, Commercial 6.9\%, Agriculture 2.1\%, transport 0.2\%, Others 9.1\% (Synopsis Report WECS, 2012) As we all know these massive uses of traditional energy threat the sustainable development of country and the dependence on the imported fossil fuel; the rising price of fossil fuel in the international market is a burden on its foreign exchange and result trade deficit.

Energy is one of the vital inputs to livelihood and consistent availability of affordable energy sources are the prerequisites of socio-economic development of Nepal. The remoteness of many hill settlements of Nepal makes these areas inaccessible from electricity grid and therefore lower access to electricity facilities. In a country with our kind of terrain, it's hard in providing basic necessities also because of inadequate infrastructure development, scattered rural households, high cost of centralized national grid power supply and poor purchasing power of the people.

The Use of Renewable energy technology can reduce the dependency on traditional energy and help to protect the environment. It also plays crucial Role in increasing people access in information technology and helps in accelerating the economic activities in remote areas of the country. Renewable energy resources are the energy resources that are obtained from sources that are replenished by nature. Some examples of renewable energy resources include moving water (hydroelectric power, tidal power, and wave power), thermal gradients in ocean water, biomass and bio wastes (bio energy and bio-fuels), geothermal energy, solar energy, and wind energy. Renewable energy resources (hydroelectric power, solar energy, biomass and biowaste) are sustainably available in Nepal and therefore, adequate utilization of these resources could certainly complement the country's renewable energy portfolio. Being environment friendly, renewable energy also contributes to significant reductions in greenhouse gas (GHG) emissions, local/indoor air pollution, and minimizes the impact on the landscape, and physical, geographical and natural
environments. A decentralized renewable energy system is likely to improve the life quality of the rural population in Nepal.

Solar energy was first conceived as a viable alternative form of power as early as in the 1860s when coal was expected to be running out of supply. The oil crisis of 1973 brought renewed attention to the potential of solar power as alternative source of energy. In response, industrial countries made a concerted effort to develop solar power (Status of Solar Photovoltaic Sector in Nepal, AEPC, 2011). The first recorded use of Solar PV in Nepal can be traced back to 1963 when Civil Aviation Authority of Nepal installed a Solar PV system in Bhadrapur Airport to run navigation equipment. Its use for domestic electrification started in 1992/93 and gained momentum from 1996 when Alternative Energy Promotion Centre (AEPC) was established. To promote rural electrification through solar energy, Government of Nepal, in partnership with Danish, Norwegian and German governments, has introduced subsidy program to encourage the adoption of solar home system. The scheme is known as Solar Energy Support Program (SSP) and is one of the components of Energy Sector Assistance Program (ESAP) which is nested within Alternative Energy Promotion Center.

Solar PV Home System is the system in which the energy from sunlight is converted into electricity. It is the household electricity supply system with Solar Photo Voltaic panel of capacity of 5 Wp to 10 WP and more, and bundled with battery, battery charge controlling mechanism and appropriate number of lights." Solar Home System (SHS) is defined as the household electricity supply system with solar photovoltaic panel of capacity 10 WP or more and connected with battery, charge controller and appropriate number of DC lights" (AEPC, 2010). AEPC/ESAP started providing subsidy for SHS through interim rural energy fund(IREF)from April 2001. Total installed capacity of Solar PV in Nepal is more than 9 Megawatt $(9,123,668$ Wp , AEPC, Status Of Solar Photovoltaic) .It is estimated that over 390,000 population have access to electricity from these systems. AEPC has targeted to install 80,000SHS by providing subsidy by of Rs 640000000 for fiscal year 2010/11(Subsidy Disbursement status of SHS, 2012, AEPC). A total of 336000 units of SHS have been installed in 73 districts till December, 2012 and the trend is in increasing numbers.

The Budget for the fiscal year 2013/14 has allocated RS 1.11 Billion to install solar energy plant in 125,000 low-income households.

### 1.2 Statement of the Problems

Energy is indispensible in modern societies. We need energy for home appliances, lighting, transportation, cooking, heating/cooling, communication, and industrial processes to produce and supply commodities of our daily needs. Thus, energy is one of the most important indicators of socio-economic development and plays vital rile in increasing and improving the living standard.

As we know that Nepal is in Energy crisis about $82 \%$ of the total population lives in rural areas. More than $80 \%$ of Nepal's total energy demand is being met by traditional sources. Though Nepal possess about $2.27 \%$ of the world hydropower potential, less than $2 \%$ of its total energy demand is being met by electricity. The access to electricity is even low and inequitable particularly in the poor rural areas. Even in electrified areas, there has been an acute power shortage in recent years, with residents forced to live up to 14 hours of daily load shedding. In most of the rural areas, people are still using kerosene lamps, which is expensive as well as they are not easily available.

Very difficult terrain and scattered settlements makes centralized grid supply to all the population in Nepal very difficult. Photovoltaic technology is deemed to be one of the most appropriate means to provide electrical energy for various applications in remote areas of Nepal. (Shrestha, et al.2003)

On average Nepal has 6.8 sunshine hours per day with the intensity of solar insolation ranging from 3.9 to $5.1 \mathrm{kWh} / \mathrm{m} 2$-day (the national average is about $4.7 \mathrm{kWh} / \mathrm{m} 2 /$ day) Using photovoltaic (PV) modules of $12 \%$ efficiency and assuming peak sunshine of 4.5 h per day, the total energy generated would be $80,000 \mathrm{GWh} /$ day or 2064 million tons of oil equivalent (Mtoe) per year. This energy would be nearly $17 \%$ of the world's total primary energy supply (TPES), which is estimated to be 12,267 Mtoe for the year 2008. If we use just $0.01 \%$ of the total area of Nepal, we can generate solar electricity at $8 \mathrm{GWh} /$ day; that is $2920 \mathrm{GWH} / \mathrm{year}$, which is more than the energy generated from the Nepal Electricity Authority (NEA) owned power stations in the
year 2008/09 (i.e. 1839.5 GWh ). However, recently the Alternative Energy Promotion Centre's (AEPC) report on Solar and Wind Energy Resource Assessment in Nepal (SWERA) stated that the commercial potential of solar power for grid connection is only 2100 MW(Current status of renewable energy in Nepal Surendra K.C. Samir Kumar Khanal, Prachand Shrestha, Buddhi Lamsal, 2011)

The solar photovoltaic system is emerging as an alternative energy source not only for rural household lighting but also for commercial purposes. With development of proper institutional setup, effective dissemination and involvement of government and donor agencies solar PV technology could make significant contribution in meeting rural energy needs for decentralized rural electrification.

Nowadays there is high priority for development, use and promotion of clean energy, which can be easily available, economically affordable and environmentally sustainable, and the solar energy is one of them. The development of this solar energy will cut imported commercial fuel and help to reduce the trade deficit, help to tackle environmental problems like global warming, climate change etc, so social research studies are to be carried out in this arena which will eventually help rural propel to increase their access to light, access to energy and leads to achieve higher standard of living.

- What is the energy scenario and assess the per capita energy consumption of the study area?
- What is the socio-economic impact on Solar Home System (SHS) installed households in study area?
- What is the knowledge and attitudes towards SHS?


### 1.3 Objectives of the Study

The general objective of the study is conduction of impact assessment on Solar Home System in Sipadole and Katunje area of Bhaktapur district and to examine the prospects of using Solar Home System (SHS) in terms of energy access and their per capita consumption and it's the socio-economic benefits to the rural community. The specific objectives of the study are:

- To identify the energy scenario and assess the per capita energy consumption of the study area.
- To assess the socio-economic impact on Solar Home System (SHS) installed households in study area
- To examine the knowledge and attitudes towards SHS


### 1.4 Significance of the Study

Solar Home System is the reliable source of energy especially for lighting. It not only protects the ecological environment but also adds new scenario to the spots that ease the lives of rural peoples. The potential for Solar PV technology is obvious in those rural areas where extension of grid electricity may be techno-economically not feasible. This obviously invites for SHS installation.

About $82 \%$ of the total population still lives in rural areas of Nepal. Only $30 \%$ of rural people have electricity access, so kerosene is the most common source of lighting in rural areas. Dry cells are used to power radios and torch lights. An effort has been made to replace the kerosene lamps with efficient, cost effective, reliable and environmentally friendly SHS based torch lights. It also helps to improve child education due to increased study hours.

On economic point of view, SHS installation has not just helped to save Kerosene, battery etc, but also opens up new income generating opportunities in rural areas like weaving, photography, running telephone, Thanka painting etc.

Solar PV home system is only option for the rural electrification where due to various reasons such as diverse geology/structure of land form, the scattered settlement, electricity from national grid is not feasible and costly. Running big hydroelectricity requires huge investment and long duration of time, in this context Solar PV Home System is highly suitable which also contribute, in a small way, to control the migration of people from rural to urban areas in search of better way of life and for other facilities. Solar energy is less costly than micro hydropower and other electricity and can be easily carried out from one place to other.

The study is very important for understanding and identifying the changes in the status, way of living and activities of SHS user household in the study area. Assessment of the impacts of SHS users, their activities, their capacities and understanding on utilization of SHS will certainly be helpful in forming Clean Development Mechanism (CDM).The outcomes of the study will be of great importance to policy makers to formulate appropriate plan for further development of the appropriate technology that better suits the rural people needs from each and every aspects.

### 1.5 Limitations of the Study

The limitations of study consist of:

1. The study is mainly confined to Sipadole and Katunje area of Bhaktapur district. Thus, generalization of the conclusion derived from the study in national/international level may not be relevant to others.
2. The study is very specific case study. It only deals the importance of SHS in Sipadole and Katunje area.
3. The study is limited in terms of deeper analysis as only a few variables selected from the numerous factor affecting the solar energy consumption in the study area.
4. This study is limited to the socio-economic, energy, communication as well as educational aspects.

Our research being descriptive, we more conveniently use observation, Questionnaire and interview. The information provided by different households may have limited accuracy that is observed during survey activities.

## CHAPTER-II

## REVIEW OF LITERATURE

### 2.1 Theoretical Concept

The review of literature is the important aspects of planning of the study. The main focus of the study is how to find out the work, which have to done in the area of the research problem and what has not been done in the field of research study undertaken. In this study, the review of literature covers the review of analysis of financial condition of NBBL. Review of literature provides the foundation of developing a comprehensive theoretical framework for which hypothesis can be developed for testing. The literature survey also minimizes the risk of pursing the dead ends in research. The main purpose of reviewing the literature is to develop some expertise in one's are to se what new contribution can be made end to receive some ideas for developing a research design.

### 2.1.1 Concept of Credit

In the field of banking transaction, the term credit is referred to the loan. Credit is the amount of money lent by the creditor (bank) to the borrower (customers) either on the basis of security or without security.

Sum of money lent by a bank" credit and advances is an important item on the asset side of the Balance sheet. Bank earns interest on credit and advances which is one of the major sources of income for banks. "Bank prepares credit portfolio, otherwise it will not only add bad debts but also affect profitability adversely.

### 2.1.2 Types of Credit

The different types of credit are as follows:

## 1. Cash Credit

The credit is not given directly cash but deposit account is being opened on the name of the creditor and amount credited to that account. In this way, every bank loan creates deposit.

## 2. Term Credit

Money lent in lump sum to the borrowers is term loan. It is principal form of medium term debt financing having maturities of 1 to 8 years. The term loans are usually repaid in level amounts over the period of the loan, either a large final "Balloon Payment" or just a single "Bullet Payment" at maturity.

Barely 2 Myres urge that bank loans with maturities exceeding years are called term loans. The firm agrees to pay interest based on the banks prime rate and to repay principal in the regular installments.

## 3. Overdraft

It is an agreement by which the bank allows the customer to draw over and above the current account balance. Interest on overdraft is charged on debit balance on daily basis.

## 4. Working Capital Credit

It means the difference value between current assets and current liabilities. It is granted to the customers to meet their working capital gap for supporting production process. A natural process develops where in funds moving through the cycle are generated to reply a working capital.

## 5. Installment Credit

It is well know installment policy. These days most of the financial institution applied this policy for the disbursement of loans in vehicles and home appliances.

## 6. Housing Credit

Financial institution adopts this policy as residential building, commercial complex, construction of warehouse etc. It is given to those who have regular income or can earn revenue from housing project itself.

## 7. Project Credit

It is granted to the customer as per project viability. The borrower own self invest certain proportion to the project from their equity and rest will be financed by bank. Construction credits are short-term credits made to developers for the purpose of completing proposed projects. Maturities on construction credit range from 12 months to as long as 5 years depending on the size of the specific project.

## 8. Consortium Credit

No single financial institution grant loan to the project due to single borrower limit or other reason and two or more such institutions may consent to grant credit facility to the project of which is applies as consortium loan. It reduces the risk of project among them. Financers have equal charge on the projects assets.

## 9. Credit Cards and Revolving line of Credit

Banks are more singly utilizing change cards and revolving lines of credit to make unsecured customer credit. Revolving credit line lowers the cast of making credit since operating and processing cost are produced. Once the credit line is established, the customer can borrow and repay according to his needs and the bank can provide the fund to the customer at lower cost.

Change cards and credit lines tied to demand deposit accounts are the two most common revolving credit agreements.

## 10. Letter of Credit (L/C)

It is used on behalf of the customer (buyer, importer) in favor of the support (seller) for the import of goods, services starting to pay certain sum of money on the
submission of certain documents complying the stipulated terms and conditions as per the agreement of $\mathrm{L} / \mathrm{C}$.

### 2.1.3 Procedure of lending

Every bank has its own set of procedures to be followed before providing loan. Similarly, NBBL has its own procedures to be followed while providing loan. Individuals, co-operative or corporate body willing to obtain the loan from NBBL should fill up the prescribed loan application provided by the bank. The application form should be accompanied with the supporting documents such as certificate of land ownership, receipt of land revenue payment or certificate of government registration for corporate and co-operative organization.

After getting the receipt of the complete loan application form filled by the customers, the bank, employee visit the borrower's in their places-and inspect about the project site and security of assets, the suitability or the project and also gather information crucial to the economic analysis of the project.

The bank advances loans given only to those borrowers. whose project seems to appear technically feasible and economically viable as per decision made by the loan committee.

### 2.1.4 Recovery Policies and Procedures of NBBL

The NBBL not only has its lending policies and procedures but also its own set of recovery policies and procedures. NBBL provides the loan for many purposes to small farmers and there are different terms of loan of which are mostly collected in their maximum lending period, The collection of loan made by NBBL from borrower very much depends on the Purpose they have spent. The loan installment payment period may be extended depending upon some specific circumstances. NBBL has a loan recovery manual 1993, which was issued in 1993 under the NBBL loan recovery rules and regulations act 1976, and NBBL act 1967. This loan recovery manual 1993, help to collects the loan amount effectively with in its loan installment period.

The policies and procedure of loan recovery of NBBL has taken into different consideration like.

- Objectives of loan recovery manual 1993.
- Authority of bank, if breaking the agreement
- Provision of interest
- Penalty of interest
- Provision for memorandum letters
- Provision for project
- Correction of payment period
- Borrowers name publication in magazine
- Provision for auction of collateral
- Doubtful loan
- Remission of loan.


### 2.2 Empirical Review

Pradhan (2009) on his article has presented a short glimpse on investment in different sectors, its problem and prospects through his article. On this he has expressed that, "Deposit is the life blood of any financial institutions, and be it commercial bank, finance company, co-operative or non- government organization." He also added, in consideration of 12 commercial banks and nearly three dozens of finance companies, the latest figure does produce a strong felling that a serious review must be made of problems and prospects of deposit sector. Expected few joint banks, other organizations rely heavily on the businessman deposit receiving and credit disbursement.

Pradhan has mentioned that deposit mobilization carried out effectively is in the interest of depositors, society, financial sectors and the nation. Lower level of deposit rising allows squeezed level of loan delivery leaving more room to informal sector. That is why higher priority to deposit mobilization has all the relevance.

Bhatta (2012) in his article has given more emphasis on Nepalese financial market sector. He has mentioned the financial crisis occurred in China, Mexico, South Asia, Russian Federation, Equador Brazil and Argentina. This crisis affected all these economic by posing negative effects in their real output. He had also focused on Nepalese financial market, which is directly affected by the national and international events. The most affected event was 11, September incident in USA, have added more to the fragility in the global financial market. In present context in many parts of the world, the move towards liberalization is getting its momentum on one hand and the process of economic development is being threatened due to various unanticipated incidents on the other. He has defined a financial crisis is a description to financial market in which adverse selection and moral hazard problems become much worse, so that financial markets are unable to efficiently channel funds to those who have the most productive investment opportunities.

Shrestha (2014) has conducted a study on Nepal Rastara Bank Guidelines on Investment Policy of Commercial Banks in Nepal. Bank in good position to meet the daily cash requirement as bank maintain the average cash and bank balance in respect to total deposit. The performance of NIBL regarding deposit collection, granting loan and advances and investment is quite satisfactory but does not seem to follow a definite policy. NIBL has not efficiently utilized its equity capital hence return on equity is not satisfactory because of lack of sound investment policy for mobilization of its equity capital. Interest earned to total operating income of NIBL is high. However, bank failed to maintain net profit on the study. From the analysis of coefficient of correlation, there is positive and significant relation between total deposit and loan and advances and current assets and current liabilities and loan loss provision and loan advances but there is negative and no significant relationship between outside assets and net profit. Trend analysis and projection for next year of total deposits, loan and advances, investment and net profits are in increasing trend.

Pandit (2014) has conducted on Investment Policy Analysis of Joint Venture Bank Liquidity position of SBI Bank is slightly good position in compare to other banks i.e. BOK and NBBL. The liquidity of Banks is not so satisfactory so banks should improve their liquidity position to meet the current obligation. At the study of assets management ratio shows that SBI Bank is not better position regarding its on balance
activities. The profitability position of SBI is not satisfactory that the other banks. Risk ratio of BOK is the highest at all and the capital risk ratio of NBBL is highest of all. It indicates that BOK and NBBL must be careful about risk. Growth ratio of SBI and BOK have not successful to increase their sources of fund, NBBL has success to maintain its higher rate of total deposit. Trend analysis of total deposits, loan and advances, total investment and net profit and projection of next 5 years of SBI, BOK and NBBL reveals that, SBI has increasing trend values in total deposit, total investment and loan and advances of BOK and NBBL has increasing trend value of all types of trend analysis.

Lamichhane (2015) has conducted a study on Investment Policy of Commercial Bank in Nepal. The research finding of the NBBL is comparatively better than NABIL and BO, NBBL has the highest cash and bank balance to total deposit, cash and bank balance to current assets ratio. NABIL has the lowest liquidity position than that of other two banks. NBBL has good deposit collection and has made enough investment on government securities but it has maintained moderate investment policy on loan \& advances. From the analysis of assets management ratio or activity ratio, it can be concluded that NBBL is comparatively average or in between successful in compared to NABIL and BOK. The total investment of NBBL is in between in compared to other two banks. In the study, loan \& advances to total deposit is higher in BOK but total investment to total deposit is higher in NABIL. Investment on shares and debentures to total working fund ratio is higher in BOK. But the coefficient of variation is higher in NBBL. In analysis of profitability, total interest earned to total outside assets of NBBL is lower at all.

Subedi (2015) has conducted study on comparative study of financial performance between Himalayan Bank limited and Everest Bank Limited. The mean and total loans and Advances to total saving deposit ratio of NBBL is greater than that of HBL and the coefficient of variation between the ratios of HBL is less than NBBL. It means that the ratio of HBL is less than NBBL is more uniform than NBBL. According to analysis, it found that NBBL is more employing its saving deposit in term of loans and advances than that of HBL. So, loans and advances to total saving deposit ratio appear better in NBBL than HBL.

The mean total investment to total deposit ratio of NBBL is significantly greater than that of HBL but the coefficient of variation between the ratio of HBL but the NBBL. It means that the variability of the ratios of HBL is more consistent than that of NBBL. According to analysis, it if found that NBBL is more successful in utilizing its resources an investment. However, he failed to give his overall conclusion regarding the superiority of the financial performance of these two banks during the period of the study (2006-2011). He has also put several recommendations out of which few important recommendation are outlined here.

The liquidity of a bank may be affected by external as well as internal factors such as the interest ratio, supply and demand position of loans, saving to investment situation, central bank requirements and the growth or slackening tending policies management capability. HBL has maintained the ratio of cash and bank balance to total deposit considerably lower than that of NBBL. So, NBBL is recommended to increase cash and balance to meet loan demand

Shrestha (2015) has conducted study on profitability analysis of Standard Chartered Bank Nepal Limited and NABIL Bank Limited." SCBNL had more consistent operating efficiency ratio than NABIL bank limited during the study period. Both of the banks data showed that more than $90 \%$ of their total liabilities paid interest. These banks showed that smaller portion of their interest bearing interest bearing liabilities paid as interest expenses. Both the banks' weighted average cost of deposit ratio was found to be at decreasing rate. NABIL bank had lower EPS than SCBNL, which indicated that the performance of SCBNL was better than NABIL. SCBNL was paying more dividend than NABIL bank limited during the study period. The amount of dividend was almost double for SCBNL than NABIL. It meant that NABIL was in need of fund, so it was paying fewer dividends and adding more amounts under the head of retained earnings. Among the total income, more than $75 \%$ of the income came from interest sector. That indicated the main source of income was interest for both the banks. The operating expenses ratio over total expenses comprised of more than $40 \%$ for both the banks. NABIL had fluctuating return on total assets than SCBNL. SCBNL had higher return on equity than NABIL. Return on equity of NABIL was more fluctuating than that of SCBNL. SCBNL had higher return on equity ratio than that of NABIL.

## Research Gap

Going through the above study, it can be said that economic analysis of loan management is an important element for every commercial banks as it helps in managing the problem of NPA and Loan Loss Provisioning, which is raising problem for banking sector. Various researches have been found relating to the Loan Management of NBBL, but all the previous research works are fully focused on the loan disbursement, collection and outstanding. Here, in this study deposit collection of the bank and its impact on loan disbursement also included because bank can only disburse the loan if it has sufficient deposit i.e. the more the deposit the more the loan disbursement. Another fact of the previous researches is that they are focused on loan related to development banking. As we know, now NBBL has changed its function toward commercial banking also. So this research work has tried to include overall loan management of NBBL. Therefore, this study is useful to the concern bank as well as different persons: such as shareholders, investors, policy makers, stockbrokers, state of government etc.

## CHAPTER -THREE

## RESEARCH METHODOLOGY

This chapter describes the methodology employed to carry out this study. Research methodology is the process of systematically solving the research problems. The main objectives of this study are to examine the major components of the assets and capital of the Everest Bank Limited and highlighting the important facts on the basis of the relationship among these various components of assets and capital. To achieve these objectives, the study requires an appropriate research methodology. Therefore, this chapter highlights about the methodology adopted in the process of present study.

Research means to research the problems again and again to find out something more about the problem (Kothari, 1990: 10).

Methodology refers the various steps that are generally adopted by a researcher in studying his research problem along with the logic behind it. Thus, research methodology is a way to systematically solve the research problem (Wolf and Pant, 2002: 203).

An appropriate choice of research methodology is a difficult task, which is, must necessary to support the study in realistic term with sound empirical analysis. So that , the study uses the following research methodology like research design, population and sample, data collection procedure, methods of data analysis, methods of presentation, etc. Detail explanations of the above points are given which seems appropriate to understand methodology in detail.

### 3.1 Research Design

Research design is a plan of structure and strategy of investigation conceived so as to obtain answer to research questions and to control variances (Kerlinger, 1986: 275). A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure

Research design decides the fate of the proposal and its outcome. If the design is the whole outcome and report will be faulty and undependable. Therefore, the research
design is methodologically prepared. The study has used two types of research design such as Analytical research design and Descriptive research design.

An analytical research design is used to analyze the presented data and facts to be specific. In the context of NBBL, the different types of financial and statistical tools and techniques are to be used. The descriptive research design is used to show the causes of increasing or decreasing the financial variations. Thus the study is based on the wide range of variables and factors influencing the assets and capital structure of NBBL and data relating to financial analysis are presented in such manner that the research becomes more informative.

### 3.2 Population and Sample

The entire number of commercial banks functioning is the population of this study. There are 32 commercial banks operating in the country. For the analysis of financial performance and analysis only one bank i.e. Everest Bank Limited is taken purposively as the sample.

### 3.3 Sources of Data

The main sources of data for this study are secondary data. According to the requirement, published balance sheets, profit and loss $\mathrm{A} / \mathrm{C}$ and other related statements of account as well as annual report of the bank have also been collected for the last five years. For the purpose of study, various related books, booklets magazines, journals, newspapers and thesis made in this field have been referred. Personal queries, discussion and consultations are also done.

### 3.4 Data Collection Technique

Secondary data were used for the preparation of this report. Necessary and required data were collected from the corporate department of NBBL. Concerned personnel of the respected department were in contact. For primary data interview, field visit, and personal observation have been considered for gathering the information. And for secondary data, annual report of NBBL, related academic books and literature, bank's internal reports, files and others have been considered for making this report authentic and more realistic. The concerned personnel provided all the consolidated data
records as per the requirement of the report. The data compiled were classified and tabulated to the need of the study.

### 3.5 Data Analysis Tools

Relevant statistical tools and financial tools are used to find out the best appropriate outcomes as per designed objectives of the present study. The present research has used mix of following tools in the analysis. Data collected are analyzed using financial tools and statistical tools.

### 3.5.1. Statistical Tools

Brief explanations of the statistical tools used in this study are given below.

## - Arithmetic Mean (Mean)

The simple or arithmetic average in which all the observations are treated equally, is the sum of all the individual numbers divided by the number of observations.

Mean $(\bar{X})=\frac{X_{1}+X_{2}+X_{3} \ldots \ldots \ldots X_{n}}{n}$

Where $\bar{X}=$ mean
$\mathrm{X} 1, \mathrm{X} 2, \mathrm{X} 3$ to Xn are given set of observations up to the period n
$\mathrm{n}=$ number of items observed.

## - Standard Deviation

In order to indicate the variability of the individual observations, standard deviation is used in this study. Standard deviation is a function of the differences between each individual score and the overall mean score. Standard deviation measures the dispersion or variability around the mean. Standard deviation is always a positive number and is superior to the mean deviation.

The equation for the computation of the standard deviation ${ }^{(\sigma)}$ is
$\sigma=\sqrt{\frac{\sum(X-\bar{X})^{2}}{n-1}}$
$\bar{X}=$ The average (mean)
$\mathrm{Xn}=$ The individual observation
$\mathrm{n}=$ Total number of observation

## - Coefficient of Variation (CV)

When two frequency distribution have the same arithmetic mean, the variability of these two distributions may be compared by calculating their respective standard deviations. The one with the higher standard deviation will be more variable. CV is used for comparing the homogeneity, uniformity and variability of two or more distributions.

Coefficient of Variation is a relative measure of dispersion and is defined as the ratio of the standard deviation divided by the mean. That is,

$$
\mathrm{CV}=\frac{\sigma}{\overline{\bar{X}}} * 100
$$

It is usual for the risk/return model. It shows the return per unit of risk.

### 3.5.2. Financial Tools

Financial ratios are computed and interpreted from two perspectives. They are complied for a number of years to perceive trends, which is usually known as timeseries analysis. Next, they are compared at a given time for sample JVBs, known as cross-sectional analysis. Some of the selected tools are explained as below.

## Current Ratio

Current ratio is the ratio of current assets to current liabilities. It is a measure of liquidity.

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

Current assets include normally those assets of a firm, which are converted into cash within one year. These assets of a firm includes cash, bank balance, investment in treasury bills, discounts, overdrafts, short term advances loans, foreign currency loan, bills for collection, customer acceptance, stock, receivable and prepaid expenses.

Similarly current liabilities include those liabilities of a firm which are paid within one year, like current payments, cash margin, current deposits, saving deposits, inter bank reconciliation accounts, bills payable, provision for overdraft, accrued expenses, bills for collection, customer acceptance, outstanding expenses, dividend payable, and provision for taxation. Although there is no hard and fast rule for measuring this ratio, conventionally a CR ratio of $2: 1$ is considered satisfactory.

## Activity Ratio

Activity ratio is concerned with measuring the efficiency in assets management. Sometimes, these ratios are called efficiency ratios or assets utilization or turnover ratio. Because they indicate the speed with which assets are converted or turned over into sales. This ratio involves a relationship between sales and assets. Greater the rate of turnover or conversion, the more efficient the utilization and management of assets.

If the available assets are not utilized, the investment upon them will be idle and profit will also decrease, on the other hand, insufficient investment causes less production, less sales, less profit etc. So, proper balance on sales and assets is important for a firm. Various ratios are used to compute the efficiency of a firm.

## i) Cash and Bank Balance to Current Saving Deposit Ratio (CBB/CSDR)

This ratio is calculated by dividing cash and bank balance by current and saving deposit i.e

## CBB/CSDR=

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

The ratio measures the ability of bank to meet its immediate obligations. High ratio indicates liquidity positions of bank. However to high ratio is not good enough is not good as reveals the under utilization of funds.

Cash and bank balance comprise of cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic banks and balance held in foreign banks. Current and saving deposits consist of all types of deposit excluding fixed deposit.

## ii) Cash and Bank Balance to Total Deposit Ratios

The ratio shows the proportion of total deposits held as most liquid assets ratios shows the strong liquidity position of the bank. But too high ratio is not favorable for the bank because it produces adverse effect in profitability due to idleness of high interest bearing fund. This ratio is calculated by dividing cash and bank balance by total deposit i.e.

## Cashr and bank balance <br> Cash and Bank Balance to Total Deposit Ratios =

## iii) Fixed deposit to total deposit ratio

The ratio shows that what percentage to total deposit has been collected as fixed deposit. High indicate ratio better opportunity available to the bank to invest in sufficient profit generating long term loans. Low ratio means the bank should invest the fund of low cost in short term. This ratio is calculated by dividing fixed deposit by total deposit i.e.

[^0]
## Fixed deposit to total deposit ratio $=$

## Leverage Ratio

The long term financial position of the firm is judged by the leverage or capital structure ratios. The leverage ratio is calculated to measure the financial risk and the firm's ability to use debt of the benefit of the shareholders. These ratios measures the proportion of outsides fund and owner's capital used in the bank. The following ratios are used.

## i) Total Debt to Equity ratio

The ratio shows the mix of the firms operations due to the increasing interference and pressure from creditors. Low ratios implies a greater claims of owner that the outsider. In this situation owner are less benefited economic activities are good enough. There fore the ratio should neither too high or too low. This ratio is calculated by dividing total debt by equity i.e

## Total debt to Equity ratio =

## ii) Total debt to Total Assets Ratio

Totatdebt
This ratio shows the contribution of creditors for financing the assets of the bank. A high ratio indicates that the greater proportion of the bank's been financed through the outsider's fund. The ratio should be neither too high nor too low. This ratio is calculated by dividing total debt by total assets i.e.

Total debt to total assets ratio $=$
Totaldebt

## iii) Debt to Total Capital Ratio

Total capital is the sum of interest bearing debt and net shareholder's equity. It shows the proportion of debt in total capital employed by the bank. High ratio indicates greater claim of creditors. On the contrary, low ratio is the indication of lesser claim of outsider's for the sound solvency position; the ratio should not be too high or bank too low. This ratio is calculated by dividing total debt by total capital i.e.

Debt to total capital ratio $=$


## Capital Adequacy Ratio

This ratio measures the sufficiency of funds or capital maintained by the firms. In order words it helps to decide whether the existing capital is adequate or there of firm in long run. Over and under capitalization both have adverse effects on profitability of the firms. Therefore, the commercial banks have been selected to retain sufficient ratio by the central bank. As per the directive the ratio should be $85 \%$ of their total risk weighted assets and total of balance sheet transaction. Here, capital fund refers to core capital and supplementary capital. Commercial banks can not declare and distribute dividends until they met capital adequacy ratio.

## i) Net Worth to total Debt Ratio

The ratio the percentage of the net worth in relation to the total deposits collected in the bank. The ratio is a yardstick to see whether the bank has maintained in the capital fund according to the directive of NRB.

NW/TD $=\quad$ Net worth

## Total Deht

ii) Net worth to total Assets Ratio

Net worth includes share capital and shareholder's fund with respect to the credit. High ratio shows that the firm has adequate capital which is the index of safety. Moreover a bank with higher ratio is less affected by the instability of the financial market.


## Net worth to total Assets Ratio=

## Turnover Ratio

Turnover ratio is employed to evaluate the efficiency of the firm that manages and investments. So it sells the same. High ratio depicts the managerial efficiency in utilizing the resources. They show the sound profitability position of the bank. Low ratio is the result of the insufficient utilization of resources. The following ratios have been tested.

## i) Loans and advance to Total deposit Ratio

The ratio indicates the proportion of total deposits invested in loans and advances. High ratio means the greater use of deposit for investing loans and advances. But very high ratio shows poor liquidity position

Loan and advance to total deposits ratio $=\frac{\text { Loan and Advance }}{\text { TotalDeposits }}$

Loans and advance refers to the total amount of loan and advance and overdraft (i.e. in local currency plus convertible foreign currencies) and total deposit refers the total of all kinds of deposits.

## ii) Loans and Advances to Fixed Deposit Ratio

This ratio represents how many times the funds are used is loans and advances against fixed deposits. Fixed deposits are long term interest bearing obligation and loan and advances are the main sources of earning of the bank. This ratio can be computed by dividing loans and advance by fixed deposits.

Loan and advance to fixed deposits ratio $=\frac{\text { Loan and Advance }}{\text { FixedDeposits }}$

A high ratio indicates idle cash balance i.e. cash is not being utilized properly.

The ratio indicates what percentage of fixed deposit has been for loans and advances. Since fixed deposit carry high rate of interest, funds so collected need to be invested in such sector which yield at least sufficient return to meet the obligations. High ratio means utilization of the fixed deposit in form of loan.

## iii) Loans and advances to saving Deposit Ratio

This ratio examines how many times the funds are used to loans and advance against saving deposits. Saving deposits are interest bearing short term obligation and loan and advance are the major sources of generating income. This can be computed as dividing loan and advance by saving deposits.

Loan and Advance to saving deposits ratio $=\frac{\text { Loan and Advance }}{\text { SavingDeposits }}$

The ratio measured what percent of saving deposit has been used as loans and advances. Saving deposit also being as interest bearing. High ratio indicates greater utilization of saving deposit in loans and advances.

## iv) Investment to Total Deposit Ratio

Investment comprises investment in Nepal Government treasury bills, development bonds, shares and others. The bank has been shows how efficiently the major resource of bank has been mobilized. High ratio reveals that the managerial efficiency regarding the utilization of deposits. A low ratio is the result of less efficiency in use of funds. This ratio is calculated by dividing investment by total deposit i.e.

## Investment to Total Deposit Ratio=

Intvestment
v) Performing assets to Total Assets Ratio (\%)

Performing assets to total assets shows the percentage of total assets invested in performing assets i.e. for incoming generating purpose. Performing assets consists of loans and advance; bills purchased and discounted investment and money at call or short notice. Performing assets represents those total assets that are invested in the form of loan and advance like: bills purchased and discounted investment and money on the short call. This ratio can be computed by dividing performing assets by total assets.

Performing assets to total assets ratio $=\frac{\text { Performin } g \text { Assets }}{\text { TotalAssets }}$

This ratio shows how much the banks are successful in utilizing their assets for profit generating purpose. Generally higher ratio represents the higher efficiency in utilizing assets and vice- versa

## Profitability Ratio

Profit is the difference between revenues and expenses over a period of time. Profit is the should earn profits to survive and grow over a long period of time. To measure the
profitability of the NBBL, a number of ratios have been calculated and analyzed below.

## i) Return on total assets Ratio

Net profit refers to the profit after deduction of interest and tax. Total assets mean the assets that appear in assets side of balance sheet. It measures the sufficiency of bank in utilization of the overall operation. High ratio indicates the success of management in overall operation. Lower the ratio means in-sufficiency operation of the bank. This ratio is calculated by dividing return by total assets i.e.

## Return on total assets Ratio=

$\qquad$

## ii) Return on Net Worth

This ratio tested to check the profitability of the owner's investment. It reflects the extent to which objective of business is accomplished. The ratio is of great interest to present as well as prospective shareholders and also of great significance of management which has the responsibility of maximizing the owner's welfare. This ratio is calculated by dividing return by total assets i.e.

## Return on net worth=

$\qquad$

## iii) Interest Earned to Total Assets Ratio

Interest is the main source of income of a bank. Interest is earned on the loan, advances and investment made by the bank. The difference between the amount of interest earned and interest paid will be operating margin of the bank. On the other side, total assets refers to the total working fund or total utilization of fund by the bank, which is collected from various sources. Interest earned and total assets have a deep relationship. The amount or ratio of interest earned shows how efficiently and effectively the bank has utilized its assets.

Interest earned to total assets Ratio= Interest eanned

## iv) Total Interest Expenses to total interest income Ratio

Total interest expenses consist of interest expenses incurred for deposit, borrowing and loan taken by the bank. Total interest income includes interest income received from loans and advances, cash, credit, overdraft, government securities, and the inter bank loans and other investments. The ratio always shows the percentage of interest expenses incurred in relation to income realized. Lower rate is favorable from profitability point of view.

## Total Interest expenses to total interest income Ratio= <br> Interestexpenses

## v) Staff Expenses to Total Income Ratio

Staff expenses include the salary and allowance, contribution to PF and gratuity fund, staff training expenses and other expenses made for staff.

The ratio measures the proportion of income spent for the staff, whose contribution is of great significant in the success of the bank. High ratio indicates that the major proportion of the total income is used for the staff expenses. From the firm's point of view, low ratio is advantageous. But the staff prefer high ratio, as it is the result of higher level of facilities and benefits provided to them.

Staff Expenses to Total Income Ratio= Staffexpenses

## vi) Earning Per Share Ratio

The value of a firm increases with the increase in earning per share. Earning per share, commonly used as EPS is the total amount earned by a share during a year and calculated by dividing total net profit earned by a firm during a year by total number of outstanding ordinary shares. Hence, higher the amount of net profit higher will be the amount of EPS. Net profit is that part of a firm's income which remains after paying all compulsory charges on which the share holders have the full claim. As it is
the amount earned by a share of total capital, higher EPS indicates a firm's better position and vice versa. The EPS ratio is the percentage of EPS on face value per share. Following table shows the EPS ratios of the NBBL for the entire period of study:

Higher ratio shows the favorable condition of the bank.

## Earning Per Share (EPS):=

Total Earning

## vii) Price Earning Ratio

It is another type of market value ratios used to analyze the financial position of the NBBL. This ratio indicates the percentage of the market value of shares on the EPS of a firm and calculated by dividing the market value per share by the EPS.

Higher ratio shows the favorable condition of the bank.
Price Earning Ratio=
Market value per share

## viii) Loan Loss Coverage Ratio

There are two types of loan good and bad. Good loan is the one, where the borrowers pay back the amount within stipulated time. Bad loan are such where debtors do not pay back the loan amount within time limit. Bank has to make certain kind of provision in order to of bank's own safety and security. Since bank's fund is tied up in loan loss provision bank must attempt to minimize proportion of loan loss provision to total lending credit investment. Mathematically:

$$
\text { Loan Loss Provision to total lending }=\frac{\text { TotalLoanLossProvision }}{\text { TotalLending }}
$$

## CHAPTER -FOUR

## DATA PRESENTATION AND ANALYSIS

This chapter includes the presentation, analysis and interpretation of data collected from various sources in order to achieve the objectives of this study. The basic objective of this part of study is to analyze the investment policy of Everest Bank Limited in respect of it $s$ investment of funds on assets, the return from the assets created from liabilities and the future trend of the financial statistics.

### 4.1 Financial Analysis

### 4.1.1 Ratio Analysis

Ratio Analysis is used to compare a firm's financial performance and status to that of other firms or to itself overtime .Ratio analysis is one of the important tools broadly used in financial position analysis of a firm. A ratio analysis is a mathematical relationship between two related items expressed in quantitative form. A ratio may be expressed in proportion, in rate or items, or in percentage. Hence, analysis of financial statement with the help of ratio may be termed as ratio analysis. It implies the process of computing, determining and presenting the relationship of items or groups of items of financial statements (i.e. income statement and balance sheet). The ratio analysis also involves the comparison and interpretation of these ratios and the use of them for future projection.

For this research study, the ratio analysis has been taken as an important tool. Hence, various types of ratios have been calculated for the financial position analysis. The ratios which can be used for financial position analysis of a bank have been mentioned in brief bellow.

### 4.1.1.1 Liquidity Ratio

The short-term creditors of the firm are interested in the short-term solvency or liquidity of a firm. But liquidity implies, from the viewpoint of utilization of the funds of the firm that funds are idle or they earn very little. A proper balance between the two contradictory requirements, i.e. liquidity ratios measures the ability of a firm to
meet its short-term obligations and reflect the short-term financial strength or solvency of a firm. Therefore, liquidity is a pre-requisite for the very survival of a firm .According to the nature of the business of the firm; various ratios may be calculated to indicate their liquidity position. Below here have been calculated some liquidity ratios which have been thought to be important to indicate the liquidity position of a bank and have been used to analyze the financial position of Everest Bank Limited in terms of its liquidity.

## i. Current Ratio (CR)

It is the ratio of total current assets to total current liabilities and calculated by dividing total current assets by ordinary course of business, be converted into cash within a short period of time, normally not exceeding one year. The current assets of a bank include cash and bank balances, money at call and short notice, bills discounted and purchased, short term investment, interest receivable etc. simultaneously, the current ,liabilities of a firm represent those liabilities that have short-term maturing obligations to be met, as originally contemplated, within a year. The current liabilities of a bank may include deposit under various account, bills payable, tax payable, dividend and bonus payable, interest payable, short-term loan etc.

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

Current assets of joint venture bank refers to cash and near cash items (i.e. cash and bank balance, money at call and short notice, loans and advances, cash credit, bills discounted, investment, interest receivables, miscellaneous current assets) and current liabilities are deposits (i.e. saving, fixed, current, call and short deposit, other bill's payable. Miscellaneous liabilities) Following table shows the current ratios of NBBL,

Table 4.1

## Current Assets to Current Liabilities Ratio

(In million)

| Fiscal Year | Current Assets | Current Liabilities | Ratio |
| :--- | ---: | ---: | :--- |
| $2006 / 07$ | 6189.2 | 885.6 | 6.959 |
| $2007 / 08$ | 6915 | 1076.1 | 6.426 |
| $2008 / 09$ | 9520 | 11756 | 1143.2 |
| $2009 / 10$ | 16474 | 894.031 | 13.149 |
| $2010 / 11$ |  | 1744.87 | 9.441 |
| Total |  | 44.333 |  |
| Standard Deviation ( $\sigma$ ) |  | 2.385 |  |
| Mean |  | 8.867 |  |
| C.V. |  |  |  |

Source- Appendix -A

Table 4.1 reveals current ratios of the NBBL for the period of five years, i.e. from FY 2006/2007 to 2010/11.and the ratio of Everest bank is in between 6.959 to 9.441. It is also observed that the ratios in all the banks have been fluctuating over the years. Looking at the above ratios, it is concluded that the banks are not maintaining the standard ratio of $2: 1$ though the ratios has been fixed for the manufacturing companies. However, for financial companies, low CA ratio is the indication of good investment and indicates that there is no idle cash balance or other non-productive assets in the bank. It also shows that the bank's liquidity position is not sound.

As a conventional rule, a current ratio of 2 to 1 or more is considered satisfactory. This rule is based on the logic that in a worse situation, even if the value of current assets becomes half, the firm will be able to meet its obligations. The CR represents a margin of safety for creditors. The trend of the above ratios indicates that the bank has not been maintaining liquidity properly to the sufficient level however considering the nature of business and marketability of current assets the ratio is positive.

Calculating the average return (or arithmetic mean) over a given number of periods will generate an expected return on the asset. Standard deviation measures the dispersion or variability around the mean. A large standard deviation indicates that the data points are far from the mean and a small standard deviation indicates that they are clustered closely around the mean.

## ii. Cash and Bank Balance to Current Assets Saving Deposit Ratio

Cash and bank balance comprise of cash in hand, foreign cash in hand, cheques and other cash items, balance with domestic banks and balance held in foreign banks. Current and saving deposits consist of all types of deposit excluding fixed deposit.

They should maintain adequate cash and bank balance to meet the unexpected as well as heavy with drawls of deposit. High ratio indicates sound liquidity position of the bank. However, too high ratio is not good enough as it reveals the under utilization of funds.

Table 4.2

## Cash and Bank Balance to Current saving Deposit (\%)

(In million)

| Fiscal Year | Cash \& Bank Balance | Current <br> saving <br> Deposit | Ratio |
| :---: | :--- | :--- | :--- |
| $2006 / 07$ | 1139.57 | 3694.6 | 0.308 |


| $2007 / 08$ | 631.80 | 4596.55 | 0.137 |
| :---: | :--- | ---: | :--- |
| $2008 / 09$ | 1049.99 | 5867.67 | 0.179 |
| $2009 / 10$ | 1552.97 | 8075.01 | 0.192 |
| $2010 / 11$ | 2391.42 | 10703.23 | 0.223 |
| Average (X) |  | 0.208 |  |
| Standard Deviation (б) | 0.057 |  |  |

Source- Appendix-A

The table 4.2 shows that out of total current assets, cash and saving deposit represents 0.308 percent in FY 2006/07, which is highest of all during the study period. In FY 2007/08, it has decreased to 0.137 percent. It has again increased to 0.179 percent in FY 2008/09. In FY 2009/10 it has again increased to 0.192 percent and, however, in FY 2010/11 it has increased to 0.223 percent.

The average of the cash and bank balance to current saving deposit ratio is 0.208 percent. It can be said that out of current saving deposit bank normally holds cash and bank balance at an average of 0.28 percent. Higher the balance reflects the banks ability to meet the unexpected 1 the profitability of the bank.

The study period shows the standard deviation of $0.057 \%$ reflecting that the cash holding of Everest bank fluctuated considerably over the study period.

## iii. Cash and Bank Balance to Total Deposit Ratios

The ratio shows the proportion of total deposits held as most liquid assets ratios shows the strong liquidity position of the bank. But too high ratio is not favorable for the bank because it produces adverse effect in profitability due to idleness of high interest bearing fund.

## Table 4.3

## Cash and Bank Balance to Total Deposit Ratio (\%)

| Fiscal Year | Cash \& Bank Balance | Total Deposit | Ratio |
| :---: | :---: | :---: | :---: |
| 2006/07 | 1139.6 | 6695 | 17.022 |
| 2007/08 | 631.8 | 8063 | 7.835 |
| 2008/09 | 1050 | 100097.7 | 10.398 |
| 2009/10 | 1552.9 | 13802.4 | 11.251 |
| 2010/11 | 2391.3 | 18186.2 | 13.149 |
| Average (X) |  |  | 11.931 |
| Standard Deviation ( $\sigma$ ) |  |  | 3.066 |

Source- Appendix-A

It is clear from the table 4.3 that the ratio of cash and bank balance to total deposit is in increasing trend except in FY 2007/08. The highest of this ratio for the period is 17.022 percent in FY 2006/07 and the lowest being 7.835 percent in FY 2007/08.

## iv. Fixed deposit to total deposit ratio

The ratio shows that what percentage to total deposit has been collected as fixed deposit. High indicate ratio better opportunity available to the bank to invest in
sufficient profit generating long term loans. Low ratio means the bank should invest the fund of low cost in short term.

## Table 4.4

## Fixed Deposit to Total Deposit Ratio

(In million)

| Fiscal Year | Fixed deposit | Total Deposit | Ratio |
| :---: | :---: | :---: | :---: |
| 2006/07 | 1846.430 | 6695.0 | 27.579 |
| 2007/08 | 2339.53 | 8063.9 | 29.012 |
| 2008/09 | 3079.860 | 10097.7 | 30.501 |
| 2009/10 | 4242.350 | 13802.4 | 30.736 |
| 2010/11 | 5626.660 | 18186.2 | 30.939 |
| Average (X) |  |  | 29.754 |
| Standard Deviation ( $\sigma$ ) |  |  | 1.281\% |

Source: Appendix-A

Table 4.4 shows fixed deposit to total deposit ratios of the bank for 5 years each. During the whole period of study FY 2006/07 shows the lowest ratio. For the year, this ratio is $27.579 \%$, During FY 2007/08, this ratio has increased to $29.012 \%$, during FY 2008/09 it has again reached to $30.501 \%$. During 2009/10, ratio has gone up to $30.736 \%$ and in FY 2010/11 it again increased to $30.939 \%$. The table shows relatively high fluctuation in the ratios during every year. Due to the high difference between the averages of the ratio i.e. $29.754 \%$.

### 4.1.1.2 Leverage Ratio

The long term financial position of the firm is judged by the leverage or capital structure ratios. The leverage ratio is calculated to measure the financial risk and the firm's ability to use debt of the benefit of the shareholders. These ratios measures the proportion of outsides fund and owner's capital used in the bank. The following ratios are used.

## i. Total Debt to Equity ratio

The ratio shows the mty in the firms operations due to the increasing interference and pressure from creditors. Low ratios implies a greater claims of owner that the outsider. In this situation owner are less benefited economic activities are good enough. There fore the ratio should neither too high or too low.

Table 4.5
Total Debt to Equity Ratio
(In million)

| Fiscal Year | Total Debt | Total Equity | Ratios |
| :---: | ---: | :--- | :--- |
| $2006 / 07$ | 6695.5 | 612.8 | 10.926 |
| $2007 / 08$ | 8063.9 | 680.3 | 11.853 |
| $2008 / 09$ | 10097 | 832.6 | 12.127 |
| $2009 / 10$ | 14102.4 | 962.8 | 14.647 |
| $2010 / 11$ |  | 1201.5 | 15.386 |
| Average (X) |  |  | 12.988 |
| Standard Deviation ( $\sigma$ ) |  | 1.719 |  |

## Source: Appendix-B

Table 4.5 shows the total debt to total equity ratios for 5 years (FY 2006/07 to FY 2010/11). The ratio in FY 2006/07 is $10.926 \%$. In FY 2007/08 the ratio is $11.853 \%$ which is more than in previous year. In FY 2008/09, the ratio has further increased to $12.127 \%$. It is clear that total debt to equity ratio it has increased every year by certain percentage. The average is $12.988 \%$ and the standard deviation is $1.719 \%$.

## ii) Total debt to Total Assets Ratio

This ratio shows the contribution of creditors is financing the assets of the bank. A high ratio indicates that the greater proportion of the bank's been financed through the outsider's fund. The ratio should be neither too high nor too low

Table 4.6
Total Debt to Total Assets Ratio
(In million)

| Fiscal Year | Total Debt | Total Assets | Ratios |
| :---: | :---: | :---: | :---: |
| 2006/07 | 6695.5 | 8193.4 | 0.817 |
| 2007/08 | 8063.9 | 9820.3 | 0.821 |
| 2008/09 | 10097 | 12073.5 | 0.836 |
| 2009/10 | 14102.4 | 16294 | 0.865 |
| 2010/11 | 18486.2 | 21851.1 | 0.846 |
| Average (X) |  |  | 0.837 |
| Standard Deviation ( $\sigma$ ) |  |  | 0.018 |

Source: Appendix-B
Table 4.6 shows the t FY 2006/07 is $0.817 \%$. In FY 2007/08 the ratio is $0.821 \%$ which is more than in previous year. In FY 2008/09, the ratio has further increased to $3 \%$. It is clear that total debt to total assets has increased every year by certain percentage but the increase in debt is higher than increase in total assets. This means fund mobilization of the bank in total debt increased in this year. The average of $0.837 \%$ of total assets has been mobilized as total debt. The standard deviation is 0.018\%.

## iii. Debt to Total Capital Ratio

Total capital to the sum of interest bearing debt and net shareholder's equity. It shows the proportion of debt in total capital employed by the bank. High ratio indicates greater claim of creditors. On the contrary, low ratio is the indication of lesser claim of outsider's for the sound solvency position; the ratio should not be too high or bank too low.

Table 4.7
Total debt to Total capital Ratio
(In million)

| Fiscal Year | Total debt | Total capital | Ratios |
| :---: | :--- | :--- | :--- |
| $2006 / 07$ | 6695.5 | 8193.4 | 0.817 |
| $2007 / 08$ | 8063.9 | 9820.3 | 0.821 |
| $2008 / 09$ | 10097 | 12073.5 | 0.836 |
| $2009 / 10$ | 14102.4 | 16294 | 0.865 |
| $2010 / 11$ | 18486.2 | 21851.1 | 0.846 |
| Average (X) |  | 0.837 |  |
| Standard Deviation (б) |  | 0.018 |  |

Source: Appendix-B

It is noticeable in the above table that Total dept for the five years has increased gradually as a result total capital has also increased simultaneously except in the FY 2006/07. In FY 2006/07 the ratio is $0.871 \%$ but in FY 2007/08 it has increased to
0.821\%. In FY 2008/09 it has again increased to $0.836 \%$ and in FY 2009/10 it increased to $0.865 \%$ respectively. But in FY 2010/11 it decreased to $0.846 \%$.The average ratio is $0.837 \%$ and standard deviation is $0.018 \%$.

## iv. Interest Coverage Ratio

The ratio is also known as times interest earned ratio and is used to test test the debt servicing capacity of the bank. It shows the number of times of times the interest charges are covered by funds that are ordinarily available may full without causing any embarrassment to the regarding the payment of interest. Higher ratio is desirable but too high ratio indicates the firm is very conservative in using debt.

Table 4.8
Interest Coverage Ratio (\%)
(In million)

| Fiscal Year | Net profit before interest $\boldsymbol{t a x}($ NPBIT) | Interest charge | Ratio |
| :---: | :---: | :---: | :---: |
| 2006/07 | 504.3 | 530.28 | 0.951 |
| 2007/08 | 632.8 | 560.810 | 1.128 |
| 2008/09 | 674.8 | 632 | 1.068 |
| 2009/10 | 854.5 | 903.42 | 0.946 |
| 2010/11 | 1025.1 | 1144.410 | 0.896 |
| Average (X) |  |  | 0.998 |
| Standard Deviation ( $\sigma$ ) |  |  | 0.086\% |

Source: Appendix-B

Table 4.8 shows the interest coverage ratios of the bank for 5 years. The ratio has increased every year. The ratio in FY 2006/07 is 0.951 percent and in FY 2007/08, the ratio is 1.128 percent. The ratio in FY 2005, FY 2009/10 and FY 2010/11 is 1.068, 0.946 and 0.896 percent respectively. The average of the ratios for the study period is 0.998 percent and its standard deviation $0.086 \%$.

## v) Capital Adequacy Ratio

Capital adequacy reflects the financial health of the commercial bank in terms of total shareholders equity in the sense that the depositors' interest has been protected. If the bank has lower ratio then the bank needs to either inject more capital or diversify the
assets into the less risky assets so that the interest of the public is always taken care of. Nepal Rastra Bank, a central bank of Nepal, determines the minimum ratio to be maintained by the commercial banks from time to time. Similarly the Directive number four of Nepal Rastra Bank regulation circular has determined the weights to be assigned to the assets and the required ratio.

Table 4.9

## Capital Adequacy Ratio

(In million)

| Particular | 2006/07 | 2007/08 | 2008/09 | 2009/10 | 2010/11 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A)Core Capital |  |  |  |  |  |
| 1. Paid Up Capital | 315000 | 315000 | 315000 | 378000 | 378000 |
| 2. Share Premium | 6427 | 6427 | 6427 | 6427 | 6427 |
| 3. Non Redeemable <br> Preference Share | 140000 | 140000 | 140000 | 140000 | 140000 |
| 4. General Reserve Fund | 64458 | 91946 | 126107 | 173566 | 232848 |
| 5. Accumulated profit |  |  |  | 108640 | 130547 |
| 5. Capital Adjustment Funds | 31500 | 63000 | 94500 | 132300 | 170100 |
| 6. Retained Earning | 40850 | 46896 | 70533 | 7226 | 13226 |
| 7. Bonus Shares Yet To Be Capitalized |  |  | 63000 | - | 113400 |
| 8.Less: <br> Investment in shares in |  |  |  | (13414) | (13414) |


| underwriting Arrangements |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total Core Capital(A) | 598235 | 663269 | 815567 | 932745 | 1171133 |
| B) Supplementary Capital |  |  |  |  |  |
| 1. Loan Loss Provision | 71338 | 86560 | 114945 | 97572 | 137506 |
| 2. Exchange Fluctuation Reserve | 14590 | 15824 | 15824 | 16650 | 16968 |
| 3. Assets Revaluation Reserve |  |  |  |  |  |
| 4. Hybrid Capital Instrument |  |  |  |  |  |
| 5. Unsecured Subordinated Term Debt |  |  | 300000 | 300000 | 300000 |
| 6. Interest Rate Fluctuation Fund |  |  |  |  |  |
| 7. Other Free Reserves |  | 1226 | 1226 |  |  |
| 8.Provision against Investment |  |  |  | 805 | 805 |
| 9. Additional lone loss provision |  |  |  | 43567 | 49703 |
| Total Supplementary | 85928 | 103610 | 431995 | 458594 | 504982 |


| Capital(B) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C) Total Capital(A+B) | 684163 | 766879 | 1247562 | 1391339 | 1696115 |
| Total Risk Weighted Assets | 5707030 | 6924807 | 9195588 | 11273293 | 14976737 |
| Core Capital \% to Risk Weighted Assets | 10.50\% | 9.58\% | 8.87\% | 8.21\% | 7.8\% |
| Total Capital \% to Risk Weighted Assets | 11.99\% | 11.07\% | 13.57\% | 12.3\% | 11.2\% |
| Minimum Capital <br> Requirement: |  |  |  |  |  |
| Total Capital | 10.00\% | 11.00\% | 11.00\% |  |  |
| Core Capital | 5.00\% | 5.50\% | 5.50\% |  |  |
| Total Capital Fund(Excess/Short) | 1.99\% | 0.07\% | 2.57\% |  |  |
| Core Capital Fund( Excess/Short) | 5.50\% | 4.08\% | 3.37\% |  |  |

Source: Appendix-B

The table 4.9 shows that the bank has always been able to maintain adequate capital as prescribed by Nepal Rastra Bank from time to time. The ratio of capital to risk weighted assets have always exceeded the capital requirement as prescribed by Nepal Rastra Bank over all the fiscal year under study which shows that the bank is complying with the regulations meticulously and depositors interest has simultaneously protected.

## vi) Net Worth to total Debt Ratio

The ratio the percentage of the net worth in relation to the total deposits collected in the bank. The ratio is a yardstick to see whether the bank has maintained in the capital fund according to the directive of NRB.

Table 4.10

## Net worth to Total debt Ratio (\%)

(In million)

| Fiscal Year | Net worth | Total Deposit | Ratio |
| :---: | ---: | :--- | :--- |
| $2006 / 07$ | 472.8 | 6695 | 0.071 |
| $2007 / 08$ | 540.3 | 8063.9 | 0.067 |
| $2008 / 09$ | 692.6 | 10097.7 | 0.069 |
| $2009 / 10$ | 822.8 | 13802.4 | 0.060 |
| $2010 / 11$ | 1106.6 | 18186.2 | 0.061 |
| Average (X) |  |  | 0.065 |
| Standard Deviation (б) |  | 0.004 |  |

Source: Appendix-B

The ratio was 0.071 \% in the FY 2006/07 which has consistently been decreased in the consecutive fiscal year and has reached $0.069 \%$ in the FY 2008/09. The average of the ratio over the study period is $0.065 \%$ and the standard deviation is $0.004 \%$.

## vii) Net worth to total Assets Ratio

Net worth includes share capital and shareholder's fund with respect to the credit. High ratio shows that the firm has adequate capital which is the index of safety. Moreover a bank with higher ratio is less affected by the instability of the financial market.

## Table 4.11

Net worth to Total Assets Ratio (\%)
(In million)

| Fiscal Year | Net worth | Total Assets | Ratio |
| :---: | ---: | ---: | ---: |
| $2006 / 07$ | 472.8 | 8193.4 | 0.058 |
| $2007 / 08$ | 540.3 | 9820.3 | 0.055 |
| $2008 / 09$ | 692.6 | 12073.5 | 0.057 |
| $2009 / 10$ | 822.8 | 16294 | 0.050 |
| $2010 / 11$ | 1106.6 |  | 0.051 |
| Average (X) |  | 0.054 |  |
| Standard Deviation ( $\sigma$ ) |  | 0.003 |  |

Source: Appendix-B
The ratio was $0.058 \%$ in the FY 2006/07 which decreased to $0.057 \%$ in the FY 2008/09. And over two consecutive periods it decreased to $0.050 \%$ and $0.051 \%$ respectively. The average of the ratio is $0.054 \%$ and standard deviation is $0.003 \%$.

## viii) Turnover Ratio

Turnover ratio is employed to evaluate the efficiency of the firm that manages and utilized its assets to measure the effectiveness of the investment that are used to produce profit. Unlike other manufacturing concerns that bank produces loans, advances and other investments. So it sells the sa sound profitability position of the
bank. Low ratio is the result of the insufficient utilization of resources. The following ratios have been tested.
ix) Loans and advance to Total deposit Ratio

The ratio indicates the proportion of total deposits invested in loans and advances. High ratio means the greater use of deposit for investing loans and advances. But very high ratio shows poor liquidity position

Table 4.12

## Loans and Advance to Total deposit Ratio (\%)

(In million)


Source: Appendix-C

From the table 4.12, the ratio was $0.754 \%$ in FY 2006/07 and it increased to $0.756 \%$ in FY 2007/08, it further increased to $0.782 \%$ in FY 2008/09. The ratio decreased to $0.734 \%$ in FY 2009/10 and increased to $0.774 \%$ in FY 2010/11 resulting in the standard deviation of $0.017 \%$ over the study period. And the average of Everest Bank is $0.760 \%$.

## x) Loans and Advances to Fixed Deposit Ratio

The ratio indicates what percentage of fixed deposit has been for loans and advances. Since fixed deposit carry high rate of interest, funds so collected need to be invested in such sector which yield at least sufficient return to meet the obligations. High ratio means utilization of the fixed deposit in form of loan.

Table 4.13

## Loans and Advances and Fixed Deposit Ratio (\%)

(In million)

| Fiscal Year | Loans and advances | Fixed deposit | Ratio |
| :---: | :---: | :---: | :---: |
| 2006/07 | 5049.6 | 1846.430 | 2.735 |
| 2007/08 | 6095.8 | 2339.530 | 2.606 |
| 2008/09 | 7900 | 3079.860 | 2.565 |
| 2009/10 | 10136.2 | 4242.350 | 2.389 |
| 2010/11 | 14082.7 | 5626.660 | 2.503 |
| Average (X) |  |  | 2.560 |
| Standard Deviation ( $\sigma$ ) |  |  | 0.114 |

Source: Appendix-C

From the table 4.13, the ratio was $2.735 \%$ in FY 2006/07 and it decreased to $2.606 \%$ in FY 2007/08, it further decreased to $2.565 \%$ in FY 2008/09. The ratio decreased to $2.389 \%$ in FY 2009/10 and increased to $2.503 \%$ in FY 2010/11 resulting in the standard deviation of $0.114 \%$ over the study period. And the average of Everest Bank is $2.560 \%$.

## xi) Loans and advances to saving Deposit Ratio

The ratio measured what percent of saving deposit has been used as loans and advances. Saving deposit also being as interest bearing. High ratio indicates greater utilization of saving deposit in loans and advances.

Table 4.14
Loans and Advances to Saving Deposit Ratio (\%)
(In million)

| Fiscal Year | Loans \& Advances | Saving Deposit | Ratio |
| :---: | ---: | ---: | ---: |
| $2006 / 07$ | 5049.6 | 3012.750 | 1.676 |
| $2007 / 08$ | 6095.8 | 4354.870 | 1.400 |
| $2008 / 09$ | 7900 | 5632.450 | 1.403 |
| $2009 / 10$ | 14082.3 | 6929.3 | 1.463 |
| $2010 / 11$ | 9029.3 | 1.560 |  |
| Average (X) |  | 1.500 |  |
| Standard Deviation (б) |  | 0.150 |  |

Source: Appendix-C

In the FY 2006/07, the ratio is $1.676 \%$.In the four consecutive years of FY 2007/08 to FY $2008 / 09$ the ratios are $1.400 \%, 1.403 \%, 1.463 \%$ and $1.560 \%$ respectively. An average of Everest bank is $1.500 \%$. Standard deviation ratio is $0.150 \%$. NBBL has used greater amount of saving deposit as loans and advances.

## xii) Investment to Total Deposit Ratio

Investment comprises investment in Nepal Government treasury bills, development bonds, shares and others. The bank has been shows how efficiently the major resource of bank has been mobilized. High ratio reveals that the managerial efficiency regarding the utilization of deposits. A low ratio is the result of less efficiency in use of funds.

## Table 4.15

Investment of Total Deposit Ratio (\%)
(In million)

| Fiscal Year | Investment | Total Deposit | Ratio |
| :---: | ---: | ---: | ---: |
| $2006 / 07$ | 1654 | 6695 | 0.247 |
| $2007 / 08$ | 2535.7 | 8063.9 | 0.314 |
| $2008 / 09$ | 2128.9 | 10097.7 | 0.211 |
| $2009 / 10$ | 4200.5 | 13802.4 | 0.304 |
| $2010 / 11$ | 4984.3 | 18186.2 | 0.274 |
| Average (X) |  |  | 0.270 |
| Standard Deviation ( $\sigma$ ) |  | 0.038 |  |

Source: Appendix-C

From the table 4.15, the ratio was $0.247 \%$ in FY 2006/07 and it increased to $0.314 \%$ in FY 2007/08, it further decreased to $0.211 \%$ in FY 2008/09. The ratio increased to $0.304 \%$ in FY 2009/10 and decreased to $0.274 \%$ in FY 2010/11 resulting in the standard deviation of $0.038 \%$ over the study period. And the average of Everest Bank is $0.270 \%$.
xiii) Performing assets to Total Assets Ratio (\%)

Performing assets to total assets shows the percentage of total assets invested in performing assets i.e. for incoming generating purpose. Performing assets consists of loans and advance; bills purchased and discounted investment and money at call or short notice.

Table 4.16
Performing Assets to Total Assets Ratio (\%)
(In million)

| Fiscal Year | Performing Assets | Total Assets | Ratio |
| :---: | :---: | :---: | :---: |
| 2006/07 | 6703.6 | 8193.4 | 0.818 |
|  |  |  |  |
| 2007/08 | 8818.9 | 9820.3 | 0.898 |
|  |  |  |  |
| 2008/09 |  |  |  |
|  | 10598.9 | 12073.5 | 0.878 |
|  |  |  |  |
| 2009/10 | 14403.6 | 16294 | 0.884 |
|  |  |  |  |
| 2010/11 | 19067 | 21851.1 | 0.873 |
|  |  |  |  |
| Average (X) |  |  | 0.870 |
|  |  |  |  |
| Standard Deviation (\%) |  |  | 0.027 |

Table 4.16 shows the interest coverage ratios of the bank for 5 years. The ratio in FY 2006/07 is 0.818 percent and in FY 2007/08, the ratio is 0.898 percent. The ratio in FY 2008/09, FY 2009/10 and FY 2010/11 is $0.878,0.884$ and 0.873 percent respectively. The average of the ratios for the study period is 0.870 percent and its standard deviation 0.027 \%.

### 4.1.1.3 Profitability Ratio

Profit is the difference between revenues and expenses over a period of time. Profit is the crucial output of a firm, and it will have no future if it fails to make sufficient profit. The profitability ratios are calculated to measure the operating efficiency of the firm. A firm should earn profits to survive and grow over a long period of time. Profits are indispensable but it would be wrong to assume that every action initiated by management of a firm should be aimed at maximizing profits, irrespective of social magnitude and responsibilities. Even then, profit plays a fundamental role to make a firm stand strong to meet its social responsibilities. Besides the management of the firm, creditors and owners are also interested in the profitability of the firm. To measure the profitability of the NBBL, a number of ratios have been calculated and analyzed below.

## i. Return on total assets Ratio

Net profit refers to the profit e of balance sheet. It measures the sufficiency of bank in utilization of the overall operation. High ratio indicates the success of management in overall operation. Lower the ratio means in-sufficiency operation of the bank.

Table 4.17
Return on total Assets Ratio (\%)
(In million)

| Fiscal Year | Net profit after | Total Assets | Ratio |
| :--- | :--- | :--- | :--- |


|  | $\operatorname{tax}(\mathrm{NPAT})$ |  |  |
| :---: | ---: | ---: | ---: |
| $2006 / 07$ | 94.200 | 8193.4 | 0.011 |
| $2007 / 08$ | 143.500 | 9820.3 | 0.015 |
| $2008 / 09$ | 170.800 | 12073.5 | 0.014 |
| $2009 / 10$ | 237.200 | 16294 | 0.015 |
| $2010 / 11$ | 296.400 | 21851.1 | 0.014 |
| Average (X) |  | 0.014 |  |
| Standard Deviation ( $\sigma$ ) |  | 0.001 |  |

Source: Appendix-D

Table 4.17 shows return on total assets ratios of the bank for 5 years each. During the whole period of study FY 2006/07 shows the lowest ratio. For the year, this ratio is $0.011 \%$, During FY 2007/08, this ratio has increased to $0.015 \%$, and during FY 2008/09 it has again decreased to $0.014 \%$. During 2009/10, ratio has gone up again to $0.015 \%$ and in FY 2010/11 it again decreased to $0.014 \%$. The average of the ratio is $0.014 \%$ and standard deviation is $0.001 \%$.

## ii) Return on Net Worth

This ratio tested to check the profitability of the owner's investment. It reflects the extent to which objective of business is accomplished. The ratio is of great interest to present as well as prospective shareholders and also of great significance of management which has the responsibility of maximizing the owner's welfare.

## Table 4.18

Return on Net Worth Ratio (\%)

| Fiscal Year | Net profit after <br> tax(NPAT) | Net Worth | Ratio |
| :---: | ---: | ---: | ---: |
| $2006 / 07$ | 94.200 | 472.800 | 0.199 |
| $2007 / 08$ | 143.500 | 540.300 | 0.266 |
| $2008 / 09$ | 237.200 | 692.600 | 0.247 |
| $2009 / 10$ | 296.400 | 822.800 | 0.288 |
| $2010 / 11$ | 1106.600 | 0.268 |  |
| Average (X) |  | 0.254 |  |
| Standard Deviation ( $\sigma$ ) |  | 0.030 |  |

Source: Appendix-D
Table 4.18 shows return on net worth ratios of the bank for 5 years each. During the whole period of study FY 2006/07 shows the lowest ratio. For the year, this ratio is $0.199 \%$, During FY 2007/08, this ratio has increased to $0.266 \%$, during FY 2008/09 it has decreased to $0.247 \%$. During 2009/10, ratio has gone up to $0.288 \%$ and in FY $2010 / 11$ it again decreased to $0.268 \%$. The averages of the ratio is $0.254 \%$ and standard deviations is $0.030 \%$

## iii) Return on Total Deposit Ratio

The ratio shows the relation of net profit earned by the bank with the total deposit accumulated. Higher ratio is the index of strong profitability position.

Table 4.19

## Return on Total Deposit Ratio (\%)

(In million)

| Fiscal Year | Net profit after <br> tax(NPAT) | Total Deposit | Ratio |
| :---: | ---: | ---: | ---: |
| $2006 / 07$ | 94.200 | 6695 | 0.014 |
| $2007 / 08$ | 143.500 | 8063.9 | 0.018 |
| $2008 / 09$ | 237.200 | 10097.7 | 0.017 |
| $2009 / 10$ | 296.400 | 13802.4 | 0.017 |
| $2010 / 11$ |  | 18186.2 | 0.016 |
| Average (X) |  | 0.016 |  |
| Standard Deviation (б) |  | 0.001 |  |

Source: Appendix-D

Table 4.19 shows the return on total debt ratios of the bank for 5 years. It can be seen that the ratio for FY 2006/07 is $0.014 \%$. In FY 2007/08 the ratio is increased by $0.018 \%$ and FY 2008/09, it has decreased to $0.017 \%$ and FY 2009/10 also constant i.e. $0.017 \%$. In FY 2010/11 the ratio is again decreased to $0.016 \%$. The average of the ratios for the study period is $0.016 \%$. Analyzing average ratio, it can be considered that the operating efficiency of the bank is fair enough. The standard deviation for the study period is $0.001 \%$.

## iv. Interest Earned to Total Assets Ratio

Interest is the main source of income of a Bank. Interest is earned on the loan, advances and investment made by the bt earned and total assets have a deep relationship. The amount or ratio of interest earned shows how efficiently and effectively the bank has utilized its assets. Table 4.20 shows the interest earned to the total assets ratios or the NBBL for various years of the study.

Table 4.20
Interest Earned to Total Assets Ratio
(In million)

| Fiscal Year | Interest Earned | Total Assets | Ratio |
| :---: | :--- | :--- | :--- |
| $2006 / 07$ | 520.17 | 8193.40 | 0.063 |
| $2007 / 08$ | 657.25 | 9820.30 | 0.067 |
| $2008 / 09$ | 719.30 | 12073.50 | 0.059 |
| $2009 / 10$ | 903.41 | 16294.00 | 0.055 |
| $2010 / 11$ | 1144.41 | 0.052 |  |
| Average (X) |  | 0.059 |  |
| Standard Deviation (б) |  | $0.005 \%$ |  |

Source: Appendix-D

The table 4.20 shows that the ratio in the FY 2006/07 is 0.063 percent. But in the consecutive year 2007/08 the ratio increased to $0.067 \%$. The ratio decreased to 0.059 percent in FY 2008/09 which further decreased to 0.055 percent in FY 2009/10. Despite the rate of interest in the market for the first three years reduced drastically the ratio of Everest Bank for the first three years seems satisfactory. Despite that the ratio increased to 0.067 percent in FY 2007/08 which reflects that the assets have been properly utilized. Despite drastic fall in interest rate in domestic market and fierce competition NBBL still earned 0.067 \% return on its assets in FY 2007/08.

The average of the ratios is 0.059 and standard deviation is $0.005 \%$. It reveals that the interest earning of the bank is satisfactory. The bank has used its assets effectively and efficiently earning interest.

As interest is the main source of income of bank, the profitability of the bank largely depends on its interest earning capacity. As already said, making loan and advances at an attractive rate of interest is not oank should be able to earn (collect) the interest from loan, advances and investment in time. Higher interest earned to total assets ratio shows bank's better position. Hence it can be said that despite the reduction in interest rate and competition NBBL is successful in earning good return on its assets which also resembles the assets quality of NBBL.

## iv. Total Interest Expenses to total interest income Ratio

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

The ratio always shows the percentage of interest expenses incurred in relation to income realized. Lower rate is favorable from profitability point of view.

## Table 4.21

Total Interest Expenses to Total Interest Income Ratio
(In million)

| Fiscal Year | Interest Expenses | Total Interest <br> Income | Ratio |
| :---: | :--- | :--- | :--- |
| $2006 / 07$ | 307.64 | 530.280 | 0.580 |
| $2007 / 08$ | 316.37 | 560.810 | 0.564 |
| $2008 / 09$ | 299.56 | 632 | 0.474 |
| $2009 / 10$ | 401.40 | 503.41 | 0.444 |
| $2010 / 11$ | 517.17 | 1144.41 | 0.452 |


| Average (X) | 0.503 |
| :--- | :--- |
| Standard Deviation ( $\sigma$ ) | 0.058 |

Source: Appendix-D

Table 4.21 shows that the average of the interest paid to total liabilities ratios for the period of five years i.e. FY 2006/07 to 2010/11 to be 0.503 percent and standard deviation to be $0.058 \%$. The ratio has been consistently decreased in the five consecutive years. The highest ratio for the period has been observed in the FY 2006/07 when it is 0.580 percent and the lowest in the FY 2009/10 when it is 0.444 percent. The reason for the decrease in ratio can be attributed to the high non interest bearing deposit in the deposit mix of NBBL and the decrease in the interest rate in the market along with the high liquidity in the market.

## CHAPTER FIVE

## SUMMARY,CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Summary

This study is conducted to obtain overall view of financial performance analysis of the Everest Bank. Liquidity of NBBL is not adequate. It is unable to maintain its liquidity position at standard level as the current ratio in last two years is below the required standard level i.e. 2:1. Debt equity ratio of NBBL shows that it is moving towards higher trend, which indicates owners are investing less resource of their own. This reveals danger to the creditors, as during period of low profit, a highly debtfinanced company cannot even pay the interest of creditors.

The study reveals current ratios of the NBBL for the period of five years, i.e. from FY 2006/2007 to 2010/11. and the ratio of Everest bank is in between 6.959 to 9.441 . It is also observed that the ratios in all the banks have been fluctuating over the years. Looking at the ratios, it is concluded that the banks are not maintaining the standard ratio of $2: 1$ though the ratios has been fixed for the manufacturing companies. However, for financial companies, low CA ratio is the indication of good investment and indicates that there is no idle cash balance or other non-productive assets in the bank. It also shows that the bank's liquidity position is not sound.

The study showed that out of total current assets, cash and saving deposit represents 0.308 percent in FY 2006/07, which is highest of all during the study period. In FY 2007/08, it has decreased to 0.137 percent. It has again increased to 0.179 percent in FY 2008/09. In FY 2009/10 it has again increased to 0.192 percent and, however, in FY 2010/11 it has increased to 0.223 percent.

The average of the cash and bank balance to current saving deposit ratio is 0.208 percent. It can be said that out of current saving deposit bank normally holds cash and bank balance at an average of 0.28 percent. Higher the balance reflects the banks ability to meet the unexpected liabilities when they arise but on the other hand high ratio of cash and bank balance reflects the inefficiency of the bank management to manage the liquidity thus affecting the profitability of the bank.

The study showed that fixed deposit to total deposit ratios of the bank for 5 years each. During the whole period of study FY 2006/07 shows the lowest ratio. For the year, this ratio is $27.579 \%$, During FY 2007/08, this ratio has increased to $29.012 \%$, during FY 2008/09 it has again reached to $30.501 \%$. During 2009/10, ratio has gone up to $30.736 \%$ and in FY 2010/11 it again increased to $30.939 \%$. The table shows relatively high fluctuation in the ratios during every year, due to the high difference between the averages of the ratio i.e. 29.754 \%.

The study showed the total debt to $/ 09$, the ratio has further increased to $12.127 \%$. It is clear that total debt to equity ratio it has increased every year by certain percentage. The average is $12.988 \%$ and the standard deviation is $1.719 \%$.

The study showed the total debt to total assets ratios for 5 years (FY 2006/07 to FY 2010/11). The ratio in FY 2006/07 is $0.817 \%$. In FY 2007/08 the ratio is $0.821 \%$ which is more than in previous year. In FY 2008/09, the ratio has further increased to $3 \%$. It is clear that total debt to total assets has increased every year by certain percentage but the increase in debt is higher than increase in total assets. This means fund mobilization of the bank in total debt increased in this year. The average of $0.837 \%$ of total assets has been mobilized as total debt. The standard deviation is 0.018\%

It is noticeable in the above table that Total dept for the five years has increased gradually as a result total capital has also increased simultaneously except in the FY 2006/07. In FY 2006/07 the ratio is $0.871 \%$ but in FY 2007/08 it has increased to $0.821 \%$. In FY 2008/09 it has again increased to $0.836 \%$ and in FY 2009/10 it increased to $0.865 \%$ respectively. But in FY 2010/11 it decreased to $0.846 \%$.The average ratio is $0.837 \%$ and standard deviation is $0.018 \%$.

The study showed that the interest coverage ratios of the bank for 5 years. The ratio has increased every year. The ratio in FY 2006/07 is 0.951 percent and in FY 2007/08, the ratio is 1.128 percent. The ratio in FY 2008/09, FY 2009/10 and FY 2010/11 is $1.068,0.946$ and 0.896 percent respectively. The average of the ratios for the study period is 0.998 percent and its standard deviation $0.086 \%$.

The study showed that the bank has always been able to maintain adequate capital as prescribed by Nepal Rastra Bank from time to time. The ratio of capital to risk weighted assets have always exceeded the capital requirement as prescribed by Nepal Rastra Bank over all the fiscal year under study which shows that the bank is complying with the regulations meticulously and depositors interest has simultaneously protected

The net worth to total asset ratio was $0.058 \%$ in the FY 2006/07 which decreased to $0.057 \%$ in the FY 2008/09. And over two consecutive periods it decreased to $0.050 \%$ and $0.051 \%$ respectively. The average of the ratio is $0.054 \%$ and standard deviation is $0.003 \%$.

From the study, the loan and advance to total deposit ratio was $0.754 \%$ in FY 2006/07 and it increased to $0.756 \%$ in FY 2007/08, it further increased to $0.782 \%$ in FY 2008/09. The ratio decreased to $0.734 \%$ in FY 2009/010 and increased to $0.774 \%$ in FY 2010/11 resulting in the standard deviation of $0.017 \%$ over the study period. And the average of Everest Bank is $0.760 \%$. From the above study, the investment to total deposit ratio was $0.247 \%$ in FY 2006/07 and it increased to $0.314 \%$ in FY 2007/08, it further decreased to $0.211 \%$ in FY 2008/09. The ratio increased to $0.304 \%$ in FY 2009/10 and decreased to $0.274 \%$ in FY 2010/11 resulting in the standard deviation of $0.038 \%$ over the study period. And the average of Everest Bank is $0.270 \%$.

The study showed that return on total assets ratios of the bank for 5 years each. During the whole period of study FY 2006/07 shows the lowest ratio. For the year, this ratio is $0.011 \%$, During FY 2007/08, this ratio has increased to $0.015 \%$, during FY 2008/09 it has again decreased to $0.014 \%$. During 2009/10, ratio has gone up again to $0.015 \%$ and in FY 2010/11 it again decreased to $0.014 \%$. The average of the ratio is. $0.014 \%$ and standard deviation is $0.001 \%$.

The study showed that return on net worth ratios of the bank for 5 years each. During the whole period of study FY 2006/07 shows the lowest ratio. For the year, this ratio is $0.199 \%$, During FY 2007/08, this $\mathrm{r} \%$. The average of the ratio is $0.254 \%$ and standard deviations is $0.030 \%$.

### 5.2 Conclusion

NBBL is one of the leading banks among 32 commercial banks operating so far, which has been conferred the NICCI Excellence Award during the 9th, 10th and 11th Annual General Meeting of Nepal India Chamber of Commerce \& Industry (NICCI). Significant portion covering $118.2 \%$ increment in credit disbursement in various sector contributed in income of NBBL in the year 2007/08. Thus, credit management became major concern for bank's income.

Despite fragile law and order situation especially during last 2-3 years, the Bank has doubled its deposits, advances as profits during the period. Its operating profit have grown by $55 \%$ during the financial year 2007/08, the net profit has increased by $52 \%$. On the other hand, credit deposit ratio is in fluctuating trend. It also depicts that the bank has been able to mobilize its deposit efficiently in the year 2007/2008 as the ratio of that year is higher as compared to others i.e. $78.23 \%$. Thus, most of the deposits collected are deployed as loans and advances and remaining amount for investment in securities and purchase of assets.

The study showed that the return on total debt ratios of the bank for 5 years. It can be seen that the ratio for FY 2006/07 is $0.014 \%$. In FY 2007/08 the ratio is increased by $0.018 \%$ and FY 2008/09, it has decreased to $0.017 \%$ and FY 2009/10 also constant i.e. $0.017 \%$. In FY 2010/11 the ratio is again decreased to $0.016 \%$. The average of the ratios for the study period is $0.016 \%$. Analyzing average ratio, it can be considered that the operating efficiency of the bank is fair enough. The standard deviation for the study period is $0.001 \%$.

The study showed that the interest earn to total asset ratio in the FY 2006/07 is 0.063 percent. But in the consecutive year 2007/08 the ratio increased to $0.067 \%$. The ratio decreased to 0.059 percent in FY 2008/09 which further decreased to 0.055 percent in FY 2009/10. Despite the rate of interest in the market for the first three years reduced The study showed that the average of the interest paid to total liabilities ratios for the period of five years i.e. FY 2006/07 to 2010/11 to be 0.503 percent and standard deviation to be $0.058 \%$. The ratio has been consistently decreased in the five consecutive years. The highest ratio for the period has been observed in the FY 2006/07 when it is 0.580 percent and the lowest in the FY 2009/10 when it is 0.444 percent. The reason for the decrease in ratio can be attributed to the high non interest bearing deposit in the deposit mix of NBBL and the decrease in the interest rate in the
market along with the high liquidity in the market. The study indicated that general expenses to total income ratio for five years. In FY 2006/07 the ratio is $0.147 \%$. The ratio for FY 2007/08, FY 2008/09, 2009/10 \& 200/11 is $0.132 \%, 0.150 \%, 0.135 \%$ \& $0.129 \%$ respectively. The average ratio for the five year period is $0.141 \%$ and standard deviation is $0.008 \%$.

The study found that the EPS ratio for five years. It reveals that, average of the EPS ratio for the period is 54.20 percent i.e. during the period the bank's share have earned at an average of 54.20 percent on their face value. The ratio are fluctuate during the study period from 29.90 up to 78.40.The recent trend of the earning per share reflects that the shareholders are earning good return from their investments. Due to the high difference between the lowest and highest ratios of the period, the table shows a standard deviation of 18.19 \%, i.e. there is an average fluctuation of $18.19 \%$ in the ratios over year

NBBL has been advancing different types of credit facilities to the customers. In last five years i.e. from FY 2006/07 to FY 2010/11, the figure reveals that bank has deployed into numerous sectors which has risen over the years. In conclusion, we can say that the bank has been able to mobilize their deposits accumulated efficiently in various sectors that help them generate income as interest. As for classification of loan the bank has maintained its standard, sub-standard and doubtful level as per NRB directives but bad loan has extremely increased by NPR 122.42 million, therefore Bank must focus and concentrate in reducing such bad loan. The good quality and correct features of security that bank undertakes should be grAs for net profit to loan and advances ratio, the figures explain consistent behavior of the bank except decrease in FY 2006/07 by 1.87\%, but increased in 2008/09 and 2010/11. Therefore the trend shows that there is quite an amount of profit earned through deploying it into various productive sectors. Bank has been able to maintain the provision of total lending to quite a reasonable ratio. The bank has maintained adequate provision for loan loss which is favorable for the bank. During five fiscal years the bank's current ratio is below $2: 1$ which may be interpreted to be insufficiently liquid as it represents the margin of safety to the creditors. During five fiscal years debt equity ratio show steady rise and fall in the bank's financial performance. Profitability trend is not steady; the ratio is in a fluctuating situation.

Finally, this report has been prepared by personally indulging in the daily working of the bank. It familiarizes NBBL's functions at the corporate level as well as in branch level, along with the credit policies procedures, appraisals and credit analysis including practical observations pertaining to the bank

### 5.3 Recommendations

The study on financial performance of NBBL has revealed various financial performance and functional aspects of bank. The following recommendations are suggested to improve and promote positive image of the bank:

- NBBL should formulate different plans and policies to retain its present customers and to attract new and potential customers.
- NBBL has been serving its customers by introducing various types of loans and deposit schemes. It should introduce further innovative schemes which will help to satisfy its customers.
- NBBL should continue to consider principles of good lending while formulating credit policy and revise and amend them as per Nepal Rastra Bank directives, bank's own policy and objectives.
- Bank should follow entrepreneur- friendly credit policy to tap new market segment consisting of the people with great entrepreneurship spirit and potential. Further credit decision of the bank should weigh viability of the project and credit worthiness to ensure recovery of the loan.
- NBBL also advances loan against gold, silver and other jewelries so it should continue in this matter since this provision can help increase potential customers.
- NBBL should further increase its services and lending rates to priority and deprived sectors as well. Lending in such sectors increases the economic condition of the general public.
- The bank should protect and build up its deposit base so that it can withstand with major competition within commercial banks.
- NBBL should adjust its interest rates so as to encourage saving and investment.
- NBBL should widen its scope of investment. It should discover new and fresh areas of investment.


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[^0]:    Fixeddeposit

