# **CHAPTER - I**

## INTRODUCTION

# 1.1 Background of the Study

Public debt has been the important source of fund to finance the development plans of the government of Nepal. As the budgetary situation of the government has always deficit. Some portion of deficit is met through the domestic and foreign borrowing as a result the volume, if debt as also increases quite sharply in the recent years. A country like Nepal, Public borrowing helps in achieving of growth rate. It allows for higher level of investment then it's saving can meet. It narrow down the gaps between saving and investment required for a targeted growth rate. The type of bonds and Treasury bills use by the government of Nepal to collect internal debt (Bista, 2015).

Public debt is a legal obligation of the part of a government to make interest or paying back payments to holders of designated claims in accordance with a defined temporal schedule. After the Second World War, public debt seemed a very vital source of development expenditure. Most of the countries in the world started to borrow systematically and still borrowing to develop their economics at a faster pace (Joshi, 1982). The phenomenon of public debt was originated in Great Britain in the 17th century where a group of merchants provided grants and loans to the government. In return, they received the privilege of royal charter to fund the Bank of England, which becomes the country's Central Bank. There are discrete references to the great king, Prithvi Narayan Shah, raising revenue and even borrowing from the public for unifying the kingdom of Nepal. Even Rana Prime Minister Chandra Shamsher is reported to have borrowed money from Pashupati Nath Temple to resettle the emancipated slaves around 1925 (Sharma, 2002).

Bhandari (2014) stated that the internal, external and total debt has not coursed negative impact on GDP growth of Nepal. That why, it is better to take the loan for the economic development but it should be proper utilized on productive sectors

otherwise debt trap will drag us to the path of difficult situation form where we cannot escape from it.

Nepal is an underdeveloped country. The main objective of 14<sup>th</sup> plan is to be able to attend the status of developing country by 2022. Under-developed country like Nepal are facing various problems like vicious circle of poverty, inequality, resources mobilization, unemployment, illiteracy, different types of conflicts and the natural digester like earthquake. Underdeveloped country where private sector is not well developed, government has to invest huge amount of money for development activities. To get rid from it, the country should invest as large amount of capital in socio-economic and physical infrastructure development in present time. The expenditure is growing rapidly but GDP is growing slowly. It results deficit in the budget. The deficit can be bridge by imposing more taxation or by borrowing the money from public or other agencies. Imposing more taxation is not appropriate by welfare point of view in underdeveloped country. Therefore, the more appropriate method is debt financing. Even Developed country like Canada, Japan, and USA are using the tools of public debt.

### 1.2 Statement of the Problem

The features of Nepalese economy is poverty, low productivity, low income, high MPC, low saving, existence of non-monitories sectors. There is less share of internal debt and the other hand taxation alone is not possible to raise sufficient fund. Thus, Nepal is more dependent of external debt. Public debt is one of the methods to fulfill the deficit financing. The main argument regarding public debt is whether it creates burden in the economy or not. It depends on the nature of investments productive or unproductive. If it is productive investment, there will not be a burden and if it is unproductive investment, the situation will get worse by the debt burden to the government.

In the context of Nepal, increasing the size of public debt is challenging. Every year, budgetary deficit is growing. So, there is need for effective management of available resources. The external public debt accounts large share of the total public debt in

most of the fiscal years. This shows that Nepal is dependent on foreign debt which has become a serious problem in the economy. Ever increasing debt will create a serious problem in the economy like debt trap, colonization, internal instability etc. In fact, if public debt increases and not utilized properly, there will be macro-economic imbalance which creates excessive dependency upon foreign assistance.

After the public movement of 1990's, public debt has increased rapidly but debt servicing capacity has not been accompanied. The current situation of public debt of Nepal shows that it may face debt crisis in the future. So, government should take serious attention on above mentioned problems.

Following are the research questions:

- a. What is the trend and structure of public debt in Nepal?
- b. What is the burden of public debt and debt servicing in Nepal?
- c. What is the empirical relationship between public debt and GDP?

# 1.3 Objectives of the Study

The general objective of the study is to examine and analyze the trend, structure and burden of public debt in Nepal. The specific objectives of the study are as follows.

- a. To analyze the trend and structure of public debt in Nepal,
- b. To explore the burden of public debt and debt servicing in Nepal.
- c. To examine the empirical relationship between public debt and GDP.

## 1.4 Significance of the Study

Government borrowing is necessary for developing country like Nepal. In the present context of globalization and liberalization, the development requirements are increasing. The study totally concern with role structure and trend of public debt Nepal. For the economic development of underdeveloped countries, government most invest on various sectors such as education, transportation, communication and other sector of the economy. To build-up such social overhead capitals, there is need of heavy investment. The revenue of the country itself cannot incur all the expenditure.

That is why, the important of public debt, is increasing. The load of public debt is growing rapidly, so it is a matter of the concern, otherwise it may create adverse impact on the economy.

This study provides several information of the situation of the Nepalese public debt, its scope, necessity, structure, composition, and overall impact of public debt in Nepalese economy. Effective and appropriate utilization of debt is also the matter of the study. It is also useful for the researcher, policy makers and general students. The study also provides important information of our budgetary system and contribution of public debt on budget. It also deals about the sources of debt, its present situation and some recommendation related to debt.

# 1.5 Limitations of the Study

Efforts were made to obtain reliable and accurate data and information from the relevant resources. Nevertheless, the study has recognized the following limitations:

- a. This study was emphasizes only on the role, structure and trend of public debt in Nepal.
- b. This thesis was covered only secondary data.
- c. It was not be examined the reliability of the secondary data.
- d. Study period covered only 17 years from 2000/01-2016/017

# 1.6 Organization of the Study

This thesis is divided into five different chapters. The first chapter is concerned on the introductory part of the study with background, statement of the problem, objectives, significance and limitations of the study. The second chapter reviews some literatures, books, theses, articles and so on. The chapter three describes about the data and methodology. The chapter four is related with the data analysis, presentation and interpretation of the study. The chapter five shows summary of findings, conclusion and recommendations. Finally, references are presented at the end of the thesis.

# **CHAPTER - TWO**

## REVIEW OF LITERATURE

Literature review is an important process of research work which helps us to bridge the gap between the existing problem and past research work in subject matter. Review of the related literature refers to the study of theories from the previously carried out researcher studies etc. In other words the study of other related topics that help the desired topic to be effective and more experimental is called literature review. This section includes the previously done researcher report, objective, method, and findings of these researchers that can help the present researcher to develop new ideas and identify the new aspects of the research problems.

#### 2.1 Theoretical Review

#### a. Classical View

The classical economists were generally against the public borrowing and favored the minimum role of government. They assumed that individual, consumer and business firm employ resources more efficiently. According to them, economic activities are best in private sector because they have the greed of profit, through which allocation of resources would be more efficient. On the other hand, government does not have such greed. Due to this, they are in favor of limit size of public sector and reduce the function of government to the minimum possible extent. They further believed that any government intervention into the economic results into rigidity and disrupt the smooth functioning. This would help to bring about the optimum allocation of resources and the achievement of full employment and maximum output. Under a fully employed economy, therefore government can acquire resources by borrowing only at the cost of private sector where they are more fruitfully engaged. The classicists were not against any form of government expenditure. What they favored was minimum public expenditure (Harris, 1974). In between taxation and borrowing, classicists favored taxation for the following reasons:

- Deficit financing means an increase in public debt. Since it is an easy method
  to obtain income, government is likely to be extravagant and irresponsible.
   Consequently, public debt will definitely become a burden to the economy.
- Payment of interest on public debt and refunding of the principal will require additional taxation. It might prove to be difficult since government's power to tax is not unlimited.
- Deficit financing might produce currency deterioration and price inflation.

However, the classical economists were not against all types of public debt. They favored public debt for self- liquidating projects.

Musgrave (1959) defined that self-liquidating projects are narrowly investment in public enterprises that provide the fee or sales income sufficient to service that debt incurred in their financing or they may be defined broadly as servicing of the debt incurred in their financing without requiring an increase in the future level of tax rates.

The classical economists were against the public borrowing and they favored balanced budget. The economy is always in full employment equilibrium and whatever earned is automatically spent. But during 1930"s, Keynes came up with different ideas. In his general theory he did not accept the free enterprise economy and self-equilibrating economy. He advanced the new concept of under employed equilibrium economy. He argued if the government becomes unconscious; the resources of private sector might remain unemployed for relatively longer time. In such a situation, increasing government expenditure by employing the idle resources and materials is likely to raise the level of (aggregate demand) and there by output and hence income, employment. Hence, public debt need not necessary unproductive, inflationary and burdensome. Therefore, Keynes strongly prescribed to increase the public expenditure even by undertaking deficit financing (Acharya, 2005).

### b. Keynesian View

Unlike the classical economists, Keynes did not accept the notion of free enterprises economy, which is self- equilibrium at full employment level. He advanced the concept of under employment equilibrium. He argued that resources in the private sector might remain unemployed for relatively longer time period if the government became unconscious. In such situation when resources are unemployed on large scale, government employment of these resources does not necessarily deprive the private sector of anything. On the contrary increasing government spending by using idle men and materials is likely to raise the level of aggregate demand and there by aggregate output and income. Due to this, Keynesian strongly prescribed to increase the public expenditure even by undertaking deficit financing or borrowing. For Keynesian, if debts are internally held, there is nothing to worry about their size. It is because such debt involves merely a series of transfer payments and they cancel out for the economy as a whole. Hence the only concern was on a high level of income and employment. This has emerged the concept of double budget. But Keynesian viewed that deficit budget even by undertaking public debt, would be a powerful tool during the time period of stagnation/ depression.

Keynes rejected the classical notion of a free enterprise economy, which is self-equilibrating at full employment level and emphasized the existence of underemployment equilibrium. He advances the concept of underemployed for relatively long periods if corrective or compensating action is not taken by the government. On the other hand, increased government expenditure by using idle man and materials is likely to raise the level of aggregate output and income. Hence, public borrowing need not necessary be unproductive inflationary and burdensome. Many Keynesian carried the analysis to the other extreme and hold the view that if debts are internally held, there is nothing to worry their size. Such a debt involves merely a serious of transform payments and they reject the economy as a whole. Hence, the only concern should be about economic stability at the high level of income and employment (Singh, 2004).

## c. Post- Keynesian View

During the Second World War II and post world war period, the size of public debt and servicing increased enormously. This has made the economist to make revision on the aspect of public debt. The post-Keynesian development was that it emphasized the transfer and management aspect as well as interrelationship between public debt and money supply.

The Post- Keynesian economist like Learner also shared the view that internal debt inflicts no burden simply because it is a transfer of fund from one pocket on the other from the left hand to the right hand. He further mentioned that international loan yields the borrower a real benefit and it enabled him to consume or invest more than he is earning or producing. And when he pays interest or repays the load he must tighten his belt, reducing his consumption or his investment. In the case of national debt, which had neither the benefit nor the burden, the belt cannot be let out when borrowing need not be tightened when repaying (Poudel, 2005).

It cannot be denied that internally held public debt devolves a series of transfer payments in the form of taxes and debt service payment and for the economy as a whole, they cancel out. But the volume of public debt cannot be dismissed as of no consequences. This is because heavy debt constitutes of burden for future generation. The Post- Keynesian did not reject the entirely classical notion regarding to public debt rather put it in a better perspectives.

- i. According to them, public borrowing does not always deprive the private sector from the use of resources. As for example during the time period of wide spread unemployment, it may be productive.
- ii. Besides, it is not accepted now that borrowing in the period of full employment must be inflationary. If the borrowing taps the funds otherwise used of consumption, it is not more inflationary.
- iii. A large public debt if internally held poses many problems for the economy. It complicates the monetary policy and creates difficulties of management and so on.

iv. In resorting to borrowing, government should be guided by macro-economic considerations its effects on macro-economic variables.

In a developing country for economic growth, development of industries, infrastructures and for social welfare, government may choose external borrowing. The marginal productivity of borrowed funds may be as high in relation to the rate of interest on loans available in more matured nations as to compensate for future to transfer difficulties and income drainage. The under developed country may thus supplement its own saving with command over foreign resources and the increase in the real income that this makes possible to justify the admitted complications (present and future) of foreign borrowing (http://amazon.com/books).

#### d. Recent View

Jalan (1996) opined that heavy growth of the borrowing is dangerous for the economy for two reasons: Firstly growth of debt ratio may lead crowding of public investment; Secondly, government spending out of borrowed funds might be unproductive. They observed that the part of public debt which is burdensome and that servicing falls entirely or mostly on tax revenue. If its servicing does not fall entirely on tax revenue, it is not burdensome rather it is productive. Because it itself generate resources for its debt service besides income, employment and output. Therefore all debt are not burdensome.

#### 2.2 International Context

The classical philosophy propounded by Smith (1776) and his supporters have view laissez-fair, equates a sound and balance budgetary policy that does not consider the fiscal deficit and public borrowing. Economic activities are best under the private sector because they have the greed of profit thus resources are optimally and efficiently used so the classical economists were in favor of minimum role of government.

Classical economists were generally against public debt. They assumed the minimum role of government in to the economic activities such as, maintenance of law and order, justice and social security. According to them economy is always equilibrium

in full employment, so there is no need of government regulation. They were in favor of laissez-fair policy. They preferred balanced budget. Therefore, there is no need of public debt. Classical economists like Say, Mill, Malthus gave their argument that debt crates burden in the economy because of its unproductive nature (Singh, 1991).

During World War II and the post-war years, the size of public debt increased enormously. The increase in the size of public debt has caused some revision in economists thinking on the subject. The post Keynesian economists accept a large part of modifications of the classical debt theory has brought by Keynesian economics. However, it emphasizes the transfer and management aspect as well as the interrelationship between public debt and money supply (Harris, 1974).

Public debt plays a prominent role in underdeveloped countries. Its helps the mobilization of resources for the economic Development. In such countries, resource of revenue are inadequate and insufficient for the heavy expenditure that has to be incurred for the development schemes. The objectives of the government borrowing of LDCs is that should be used as an investment to mobilize saving of people which would otherwise have gone to idle or east fully and consumption. Public debt should be advocated for creating additional capacity and producing capital equipment. Generally government borrows for the creation of infrastructures in the economy. Since it require huge investment initially which cannot be meet only though revenue collection. The aim of the government policy should be helped in strengthening the Money and capital market, which is turn accelerate development and price stability. The government of LDCs tries to mobilize the saving of the community partly through the device of public borrowing in order to meet the financial need of its developments programs. Especially in underdeveloped countries, as a fiscal instrument to rise the effective demand, which ultimately leads to accelerate pace of economic Development. It also acts as an effective instrument of inflation generated in the process of growth and ensure growth with stability. It also acts as a balancing wheel that controls the tempo of the business cycle. In the period of depression when aggregate demand is not enough to accelerate the label of production and employment, compensatory fiscal policy suggest to increase in public expenditure and

public works by mobilizing idle saving in the hands of people through public borrowing to create effective demand and promote an economic recovery (Barman, 1986).

Chelliah (2004) observed that the ideal situation is on which first, revenues will meet subsidies, other transfers, interest payment and the greater part of current expenditure, debt finance will be used for meeting the government non remunerative capital formation, a proportion of current expenditure designed to increase social capital and productivity the governments of financial investments and second, the total domestic borrowing will be determined in such way that given the rate of domestic saving, the nongovernment sector will be able to obtain a due share of saving and that there will be no need to borrow from the central bank more than the correct amount of seignior age.

### 2.3 Nepalese Context

Various researcher, student, administrators, economist, foreigners have made thesis, studies and report about Nepalese public debt. Some of those articles, thesis and project reports related to the subject included in this thesis are as follows. Joshi (1982) concluded that internal debt can play a vital role to develop money market, capital market and external debt is mainly for rapid economic development and to fill up the resource gap in the economy. for development expenditure is persistent because of poor mobilization of internal resources. Macro economic imbalances such as every widening trade deficit, investment saving gap and large amount of fiscal deficit have been the main issues before N.G. there are the factor contributing to the foreign aid dependency syndrome. Excessive flow of foreign loan to bridge up three gaps (fiscal deficit, trade deficit and investment saving gaps). Therefore, the substantial increase in foreign debt has increased its burden of debt servicing but debt-servicing capacity of the economy is not increasing satisfactorily. He has found out that the average annual growth rate of GDP, export earning is considerably as compared with the rate of magnitude of debt and debt servicing requirements which clearly shows that the debt servicing capacity of Nepal is very poor which is also responsible for increasing debt obligations.

Koirala (2001) presented that public debt is a useful resource for economic development and several inverse consequences are found by its overuse. The debt crisis of 1980s is widely known as the result of the overuse of resources. The result of the overuse of resources. The WB has established MIGA and the IMF has minted SDRs to curb the crisis in the third world. He further opines that we have only two options; either mobilizes more foreign debt to invest for economic development or put the hand on hand doing nothing. In a nutshell, we should have debt management plan for its better use and regular servicing. The government debt has over a given year is equal to the budget deficit of a higher economic growth requires a higher label of investment that is not possible simply from taxation so that a government seek public borrowing.

Sharma (2002) explained that ever-increasing debt in Nepal and its servicing has really created a situation which is deriving the country towards debt trap by following reasons:

- Huge amount of loan is allocated for meeting expenses within the development expenditure.
- A good amount of borrowed fund is for debt servicing.
- Volume of borrowed amount exceed the minimum legal limited of borrowing.

Thapa (2005) analyzed that Nepal's debt burden and servicing should not be called an excessive, on the basis of its level of development. It is quite burdensome. Nepal has not taken high growth path so far and once it takes it will require enormous amount of investment and that investment will have to be made through borrowing from both domestic as well as external resources. Nepal will have to borrow an unlimited amount of financial resource form both internal and external source. Therefore, until our growth rate takes momentum. We should be extremely judicious while borrowing to finance the budget deficits. Another worrying issue is debt management system in Nepal. Now it should not be delayed even a single minute to introduce this system to remain safe from heavy price sooner or later.

Ghimire (2008) expressed that the average annual growth rate of GDP revenue and export earnings are considerably low as compared with rate of debt and its serving o ligation and most of the borrowed funds are using in unproductive sector. Because of the misuse of borrowed funds, other things remaining the same there are symptoms of steadily falling into the debt trap. The angle amount of the debt and poor serving capacity of the government compel to think the sinking co edition of the co economy. It arises several questions about the capacity of debt servicing and existing of the nation. Excessive dependency on foreign assistance makes the balance of payment on the favor of creditors which is horrible situation to get rid of. Any way it can play the useful role for the economic development of every nation and it is widely accepted measured also for financing government expenditure.

CEID Nepal (2012) analyzed the study of overall situation of public debt in Nepal. It examined that the high stock of debt , show growth rate of economy and outflow of considerable amount of resources in the form of debt servicing have raised questions debt sustainability and also whether foreign or domestic borrowing on current terms is beneficial for our economy or not. This study proposed to analyze impact of debt on macroeconomic performance and so on, the methodology approach used in this study is based on: published status reports, audits reports and financial records, and consolation and interactions with the officials of key stakeholders this study was carried out for a quick assessment of the situation, as per the call made for financial Comptroller General Office. The study has examined and identified the key issue in the overall debt situation of Nepal and has made recommendation for its improvement.

It was only after the great depression of the 1930's when new wave of thinking took place in the writing of Keynes. Who advocated for increasing government role in the economic activities by adopting deficit financing so that effective demand can be created in the economy ensuring employment opportunities. In the 1950s, a development process in the developing countries took place significantly. To meet the growing need the fund should rise for meeting development requirements. Capital deficiency resulted in increasing volume of budgetary deficits. The great depression

of 1930's and the Keynesian revolution paved the way for the development of the modern theory of public debt as a part of the functional finance. Those who follow Keynes are of the view that public debt is income generating and so it is not burden of the community (Acharya, 2015).

Bhandri (2015) stated that the level of public debt is increasing in the Nepalese economy. While talking about composition of public debt, the average share of external debt is grater then that of internal debt. However, in the latter period, the share of internal debt is significantly greater than that of external debt. The growth rate of economy seems to be relatively low. Low rate of economic and high rate of inflation is one major problem of Nepalese economy. Therefore, the efforts should be accelerating the growth rate so that more employment opportunities can be generated and income of the people can be increase. For this, those measures should be employed which increase the level of aggregate supply. For this, investment should be increase and use of new technology should be promoted. Efforts should be directed towards maintaining the price stability. As the study is based on the descriptive analysis, the cause and effect relationship between the variables could not be found. So, there is further scope to study such relationship between the abovementioned different variables.

Nepal debt is 5,779 million dollars, has increased 421 million since 2015. This amount means that the debt in 2016 reached 27.33% of Nepal GDP, a 2.3% point rise from 20015, when it was 25.03% of GDP. It has rise since 2006 in global debt terms, when it was 4,422 million dollars although it has fallen as a percentage of GDP, when it amounted to 48.9%. Nepal per capita debt in 2016 was 199 dollars per inhabitant. In 2005 it was 188 dollars, afterwards rising by 11 dollars, and if we again check 2006 we can see that then the debt per person was 171 dollars. The position of Nepal, as compared with the rest of the world, has remained in 2016 in terms of GDP percentage. Currently it is country number 26 in the list of GDP and 10 in debt per capita, out of the 184 (MoF 2016).

Hence, Nepal is indebted with internal and external debt. Nepalese budgetary deficit is fulfilled by loan, which is inflationary. However, there is no any best way to avoid

borrowing because there is low saving rate. Wide saving-investment gap, revenue-expenditure gap and export-import gap. To fulfill these deficits, there is necessary of borrowing. If it is used appropriately we can improve growth rate, otherwise, may direct towards debt trap.

#### 2.4 Research Gap

In context of Nepal, there are a few studies which focus on debt growth nexus. Past studies have also suffered from conflicting results. The past studies have open the way to future research stating that the application of relevant methodology would provide time outcomes. Further, the objectives and methodologies of the present study are different from those of aforementioned reviewed studies and articles. So, this study intends to link and fill gaps in the literature of the past at academic level covering large span of time series annual data.

Above research worked mainly concerned with the public debt of Nepal. Issues of public debt are not a new phenomenon. Earlier thesis also has studied the different aspect of public debt like trend, pattern, financial resource gap and relationship between public debt and GDP. However issues of public debt changes with the changes in time. Therefore, this earlier research study may not be grasping the current issues of public debt because these studies have used old data and information. As a result, these earlier research may not be relevant for the understanding of the different contemporary issues of public debt. In this context, this research study has tried to analyze the trend, structure and burden public debt in Nepal by using latest data and information.

Further, in the changed socio- economic structure of the economy, the past studies may not provide sound guidelines for present policy prescription. Therefore, an indepth study on relationship between government debt and economic growth is utmost important and it is expected that it will contribute extra knowledge in the existing field.

# **CHAPTER - III**

# RESEARCH METHODOLOGY

## 3.1 Research Design

Data was collected from secondary sources is presented systematically to use inductive method and other careful information and necessary interpretation is cleared in descriptively. The nature of the research design is descriptive. It is designed to examine the trend, structure, burden and role of public debt in Nepal. The descriptive analysis includes the presentation of data ratio, percentage and so on into different tables and graphs which are needed in this research. This study shows the trend, structure, burden and role of public debt in F/Y 2000/2001 to F/Y 2016/17.

# 3.2 Period of the Study

This empirical analysis was made to cover the period of seventeen years starting from F/Y 2000/2001 to F/Y 2016/2017.

# 3.3 Description of Model

## **Simple Linear Regression Model**

The simple linear regression analysis indicates the regression equation with only one independent variable. If two variables say, X and Y are linearly related and further if Y is a linear function of X, then the regression equation Y on X can be expressed as:

$$Y = a + b X$$

Where, X = independent variable

Y = dependent variable

a, b = regression parameters

Here, to explain the role of public debt on economic growth, a simple ordinary least square linear regression model is used. Gross Domestic Product (GDP) depends upon the Internal Debt and the External Debt.

It shows the Relationship between GDP and public debt.

1. 
$$GDP = a_0 + a_1 TD$$

2. 
$$GDP = a_0 + a_1 ED$$

3. 
$$GDP = a_0 + a_1 ID$$

Where, GDP = Gross Domestic Product

ID = Internal Debt

ED = External Debt

TD = Total Debt

 $a_0$ ,  $a_1$  and  $a_2$  are the parameters.

## Hypothesis Testing

Hypothesis is defined as an assumption or statement made about the population parameter. Since these assumptions may or may not be valid, we have to perform hypothesis test to confirm it.

### • F- Test

F- test is used to examine the overall significance of the model. The formula for calculation is :

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

$$(1 - R^2) / N - K$$

Where,  $R^2$  = Coefficient of determination

K = Number of explanatory variables

N = Number of observations in the sample

The calculated f variance ratio is compared with the tabulated value at a specific level of significance with (K-1) and (N-K) degree of freedom.

If F  $_{cal}$  < F  $_{tab}$ , we accept null hypothesis.

If  $F_{cal} > F_{tab}$ , we reject null hypothesis.

# 3.4 Description of the Variables

**Gross Domestic Product (GDP)** - GDP refers to the total output of goods and services produced by countries economy in a certain time period specially in a fiscal year within the territory, by resident and non-residents, regardless of its allocation between domestic and foreign claims.

**Public Debt** - Public debt refers to loan raised by a government within a country or outside the country. A government resorts to public debt when its expenditures exceed its revenue. Public loans are collected by the government form banks, institutions and individuals on the conditions given in writing that those would be repaid and interest would be paid regularly as per the terms of the loan. Governments borrow to finance their operations and to regulate the volume of aggregate activity in the economy. Public debt involves the issue of short terms and long terms securities.

**Budget Deficit** - It is the revenue gap between the total expenditure minus total revenue plus foreign grants. In other words, it is the excess of government's total expenditure over its income.

**Fiscal Deficit** - It is the gap between total expenditure minus total revenue of the government.

**External Debt (ED)** - external debt occurs when a borrowing unit acquires money from international resources. It refers to international transfer made at confessional germs rather than at market rates for promoting economic development of the nation. Alternatively, external debt refers to the obligation of a country to foreign agency or government through bilateral and multilateral sources.

**Internal Debt** (**ID**) - Internal debt refers to the public loan within the country for domestic or internal sources. The government borrows money domestically form individuals and financial institutions.

**Total Debt (TD)** - It is the sum of internal debt and external debt.

Symbolically, TD = ED + ID

**Bilateral debt (BD)** - Bilateral Debt is the debt based on a direct arrangement between two countries. Bilateral debt occurs when a debt unit acquires money or a quantity or goods and services from the government of the country.

**Multilateral Debt (MD)** - Multilateral debt results when a debt unit acquires money or goods and services from union of nations or government institutions, business person and consumers or international organizations such as WB, IMF, EU.

**Debt Servicing** - The sum of interest and principle payment and repayment or interest on external public and publicly guaranteed debt.

**Burden of Debt** - Burden of debt is the sacrifice of the community through a risk in taxation at the time of repayment and for paying the annual interests on the government.

**Export of Goods and Services (XGS)** - It is the amount of the goods and services sold to another country.

**Import of Goods and Services (MGS)** - It is the total value of goods and services purchase from the rest of the world.

**Inflation** - Inflation is defined as a gradual and persistent rise in the general price level. The consumer price index published and compiled by NRB has taken as the measurement of inflation.

#### 3.5 Nature and Sources of Data

- The study was descriptive as well as analytical in nature. This analysis of the study attempt to get various empirical results using secondary data. The secondary sources was include following sources:
- Economic Surveys and budget speeches of MoF.
- Published documents of NRB, CBS and NPC.
- Thesis available at Central Library and Library of Central Department of Economic, Tu.
- Articles published in different national and international newspapers and journals.
- websites.

#### 3.6 Data Collection Procedures

Research methodology is a way to have a systematic guidance for conducting research. It refers to the various steps to be adopted by research in studying of problem with certain objectives. It was based on facts and interpretation of information gathered in relation to the problem under consideration.

This research was basically based on the secondary data. The data required for this study will be collected by present researcher from annual reports of NPC, NRB, CBS and MoF.

#### 3.7 Tools and Techniques of Data Analysis

The data was collected from relevant sources are processed according to the need of the study. The study was based on simple tools, such as percentage, average annual growth rate and arithmetic mean, the simple linear regression analysis, Hypothesis Testing and F- Test was done. Growth rate are presented by using simple mathematical tools like average and percentage. The available data was reclassified, regrouped and analyzed in order to make them useful in examining the objective of the study. To make the information easily understandable and visible there will be use of tabulation of data and its graphical presentation, where necessary. For the analysis of data, computer Programmed Microsoft Excel was used.

### **CHAPTER IV**

### PRESENTATION AND ANALYSIS OF DATA

#### 4.1 Trend and Structure of Public Debt

Public debt plays a vital role in underdeveloped countries like Nepal. It also helps in the financing of economic development through the mobilization of resources. In Nepal, sources of revenue are inadequate and insufficient for the economic development due to the low level of income and saving capacity of people. In spite of these problems expenditure of the government is going on rapidly in order to achieve rapid economic development mobilization unutilized resources.

The underdeveloped countries like Nepal always face the problem of fund which is reflected in a large extent and as ever increasing financial resource gap in the government budget. Therefore, the selection of appropriate method for financing development plan, various method to be adopted mobilizing for the economy are among the leading issues in economics development.

Public borrowing has major sources, external and internal sources. Internally, a government can borrow for individual's financial institution, non-banking financial intuitions, commercial banks and central bank. Similarly the main sources of external borrowing are IMF, World Bank. IDA and ADB etc. These institutions give loan to the member countries for a short term for covering the temporary balance of payment difficulties and for along term for the development.

Fiscal policy must be designed to maintain or achieve the goal of high employment, a reasonable degree of price level stability, balance in the foreign accounts and an acceptable rate of economic growth. Public borrowing is needed for stabilization since full employment and price stability do not come about automatically in a market economy but require public policy guidance. Without it the economy trends to be subjects to unemployment or inflation (Musgrave and Musgrave, 1989).

Public borrowing is regarded as a prime mover for economic development. Along with this reasonable abundance of natural resource a spirit of enterprise, a technically trained labour force and dedicated civil servant are the essential requirement for

achieving rapid economic development. For this increased capital is needed which seems the fundamental problems of economic development in under developed countries like Nepal due to low label of income and saving capacity of people. In such condition government can take loan from internal as well as external sources. The scope of domestic borrowing is very limited because of scare of internal resources. All the same time the shortage of foreign exchange so only external borrowing remains alternative. Since Nepal lacks the sufficient internal resources for the economic development. The huge amount of debt is inevitable. The debt proportion of the budgeting is to be relied upon the GDP of the nation. It is hence necessary to maintain the internal debt with in the limit of 2 percentage of GDP.

## 4.1.1 Public Borrowing and Deficit Financing

Deficit financing is used to mean any public expenditure that is in excess of current public revenue. It has been used for acquiring resources for economic development. When the government cannot raise the enough revenue through taxation and other sources, expenditure meet through public borrowing know as deficit financing. To fulfill such deficit, the government can adopt the following solution, loan form central bank, loan from people external loan and issuing paper.

Government debt is the debt owned by a central government. In federal states,' government debt may also refer to the debt of a state or provincial, municipal or local government) by contrast, the annual "government deficit refers to the difference between government receipts and spending in a single year, that is, the increase of debt over particular year.

Government usually borrows by issuing securities, government bonds and bills. Less creditworthy countries sometime borrow directly from a supranational organization (e.g. the World Bank) or international financial institutions.

As the government draws it's income from much of the population, government debt is an indirect debt of the taxpayers. Government debt can be categorized as internal debt (owned to learners with in the country) and external debt (owed to foreign lenders). Another common division of government debt is by duration until repayment is due. Short term debt is generally considered to be for one year or less. Long term is

for more than ten years. Medium term debt falls between these two boundaries.

A broader definition of government debt may consider all government liabilities, including future pension payment and payment for goods and services the government has a contracted but yet paid.

Public borrowing plays a vital role in under-developed countries like Nepal. It also helps in the financing of economic development through the mobilization of resources. In Nepal, sources of revenue are inadequate and insufficient for the economic development due to low level of income and saving capacity of people. In spite of these problems expenditure of the government is going on rapidly in order to achieve rapid economic development, mobilize unutilized resources. Government receives revenue through internal sources which are not enough in maximization of resources available to the government. Since internal borrowing is very low because of poor tax payable capacity of external borrowing remains alternative sources for development economics. Under developed countries like Nepal is suffering from vicious circle of poverty. To escape out of such circle, capital formation is regarded as a prime mover of development which is necessary in Nepal. But in Nepal, the available stock of capital goods is not sufficient to employ the available labor force on the basis of modern techniques of production. This condition is rapid because it has low rate of saving, investment, income, low living standard due to low per capita income and poverty, dualistic economy, unutilized natural resources, lower health and education condition of people, deficiency of capital etc. in comparison to developed countries in which development is financed by the automatic forces of capital formation under free market economy. But Nepal has market imperfection. In such market resources are not mobilized properly due to lack of capital. So that public debt is only one solution to fulfill the lack of capital deficiency.

Fiscal policy must be designed to maintain or achieve the goals of high employment, a reasonable degree of price level stability, balance in the foreign accounts and an acceptable rate of economic growth. Public borrowing is needed for stabilization, since full employment and price stability do not come about automatically in a market economy but require public policy guidance. Without it the economy tends to be subjected to unemployment or inflation. Under-developed countries like Nepal have

low income whereby it is very difficult for mobilization of resource. Nepal has so vague areas where resources are abundant but those are not monetized. These sectors make the mobilization of financial resources more complex. People have no incentives to save. The government policy to promote development is less effective. Thus the rigorous fiscal policy must be adopted to maximize domestic saving for requires investment. The availability of capital fund can be increased through compulsory saving by the help of various fiscal instruments like borrowing, deficit financing and import restriction. There is no doubt public debt is one of the major sources for development financing in developing countries. Public borrowing is regarded as a prime mover for economic development. Along with this reasonable abundance of natural resources, a spirit of enterprise, a technically trained labor force and dedicated civil servant are the essential requirement for achieving rapid economic development. For this increased capital is needed which seems the fundamental problem of economic development in under developed countries like Nepal due to low level of income and saving capacity of people. In such condition government can take loan from internal as well as external sources.

The scope of domestic borrowing is very limited because of scarce of internal resources. At the same time, most of the under-developed countries face the shortage of foreign exchange so only external borrowing remains alternative. Thus, there is no doubt that public debt is a useful instrument for economic development of Nepal. Government is bounded to borrow for financing economic development due to low level of capital formation, which leads to low level of income and wide spread poverty. So to fulfill the lack of capital deficiency public debt plays a prominent role in under developed countries like Nepal either internal or external sources (Krishna, 1998).

Deficit financing is used to mean any public expenditure that is in excess of current public revenue. It has been used for acquiring resources for economic development. When the government cannot raise the enough revenue through taxation and other sources, expenditure meet through public borrowing known as deficit financing. To fulfill such deficit, government can adopt the following solutions:

Loan from Central Bank, Loan from people, Issuing paper money and External loan

Deficit financing cannot create real resources, which do not exist in the economy. It is only a device that helps to transfer resources to government. The real resources require for economic development must exist in the form of material equipment, labor and skill. Printing money or issuing bank credit cannot create these things. Deficit financing only can put the funds at the disposal of government which can be used for acquiring the real resources provided they are available in the economy.

Deficit financing is the most useful method of promoting economic development of under-developed countries and may be used for the development of economy and social overhead capital such as construction of roads, railway, power projects, school, hospitals etc. By providing socially useful capital, deficit financing is able to break bottlenecks such as lack of capital, technical skill and monetary stability etc. of development and thereby increase productivity. Deficit financing as an instrument of economic development, has been given an important place in Nepal's development plans. It has been regarded as a means to cover the gap in financial resources for want of adequate internal and external monetary sources in order to fulfill the physical targets in the plans.

Deficit financing is restored mainly to enable the government to obtain necessary resources for plan. The level of outlay local down by government cannot meet only by taxation and other resources. The gap in resources some extent is made up partly by external assistance but when external assistance is not enough to fill the gap, deficit financing has to be undertaken when the target of production and employment cannot be achieved by the level of expenditure with resources obtained through taxation and other sources, additional resources have to found. How much deficit financing must be done is decided by lacking into consideration a number of other important factors and careful limits. A policy of deficit financing is an important and most fruitful instrument for capital formation in under-developed countries like Nepal. However, deficit financing always does not provide available long term solution. The Nepalese experience has clearly established the fact that heavy dose of deficit financing are advisable because heavy dose of money infected economy and also creates the problem of monetary of monetary stability which make the fruits of development meaningless. It may also lead to inflationary pressure and loss of confidence in the

currency. Thus, the effects of deficit financing may be dangerous to economy if its limits are exceeded. So, greater stress needs to be placed on the mobilization of domestic resource for financing of development programs in Nepal. In this context, public borrowing can be taken as effective instruments for mobilization of economic resources for development in Nepal.

### 4.1.2 Resource Gap in Nepalese Economy

Public expenditure is the expenditure made by the government for the welfare of the people through the fund collected through tax and revenue, internal and external borro«-in foreign grants and all other receipts by the government. The main motive of the public expenditure is the overall welfare of the people and the nation.

Government borrowing is interrelated with the basic government fiscal flows of taxation and expenditure. When the volume of government expenditure exceeds that of the government revenue, the deficit budget arises. Thus, a deficit budget provides the fundamental pre-condition for debt creation. Such created debt needs interest payment to maintain the debt and refinancing operations of the debt.

Nepal is a least developed country has been facing the problem of funds where the level of government revenue is very low became of low tax payable capacity of people but the level of government expenditure is increasing rapidly. The government needs heavy investment for infrastructure development and socioeconomic development. Since, government revenue is not sufficient for such development, public borrowing plays a prominent role to bridge the fiscal deficit of a country to meet such investment.

The main reasons for raising the government borrowing can be categorized as: collect necessary fund, recover budgetary fund, import knowledge and technology, collect fund for infrastructure development and economic development, increase production, create employment opportunity, meet the emergency and special expenses, sustain the economic and monetary stability,

A country like Nepal public debt help in achieving a growth rate not permitted by it's saving level for investment it allows for higher level of investment than it's saving can meet. It narrows down the gap between saving and investment.

In Nepal, first experience of foreign aid was that of the US government in 23<sup>rd</sup> January, 1951 with that of the US government of "point four program". In the First Five Year Plan (1956/57-1960/61) of Nepal the development expenditure was fulfilled by foreign loan/grants. But from Second Three Year Plan (1962/63-1964/65), Nepal started to obtain the external debt from 1963/64 and internal debt from FY 1962/63.

Nepal has been borrowing rapidly mainly to balance her budgetary deficit. A large number of infrastructures are essential for the development of the economy. Since Nepal lacks the sufficient internal resources for the economic development the huge amount of debt is inevitable. The debt proportion of the budgeting is to be relied upon the GDP of the nation. It is hence necessary to maintain the internal debt within the limit of 2 % of GDP.

Resource in Nepalese economy has always been common phenomenon since the starting of the systematic budgeting system in Nepal. Nepal is facing the serious and growing problem of resource gap. This is because of the growth of the growth rate of the total expenditure and it's revenue generation is not increasing at the same rate. Every individual as well as government needs fund to maintain their expenditure but importance of fund is much essential for government due to the concept of national development to finance for the development works government must be collect funds through the taxation and other source of revenue. However government revenue is inadequate to meet the expenditure because of limited sources of revenue generation. To collect needy funds government must be increased in the tax and fees, which is unjustified for the point of view of social welfare. On the other side the tax and custom administration is not fair transparent and agile to somewhat extent so that government cannot collect the revenue as it predicts. In Nepal marginal propensity to save is low and tax evasion is widespread. The annual growth rate of total expenditure and that of it's revenue are not keeping in the same pace.

Table 4.1

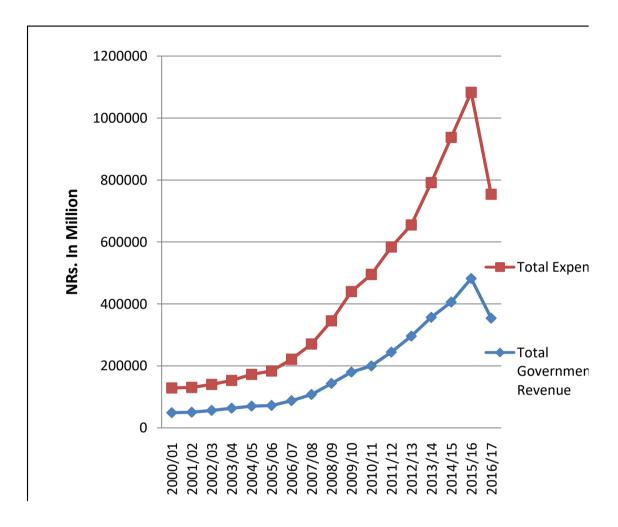
Different Scenario of Resource Gap (NRs. In Million)

Fiscal Year	Total Govt. Rev.	Annual Growth rate of Govt. Rev.	Total Exp.	Annua l Growt h Rate of Govt. Exp.	Rev. Exp. Gap	GDP	Rev. as % of GDP	Exp. as % of GDP	Rev. Exp. Gap as % of GDP
2000/01	48893.6	14	79835.1	20.5	30941.5	394052	12.4	20.3	7.9
2001/02	50445.5	3.2	80072.2	0.3	29626.5	425454	11.9	18.8	7
2002/03	56229.8	11.5	84006.1	4.9	27776.3	444052	12.7	18.9	6.3
2003/04	63331	10.9	89442.6	6.5	27111.6	473545	13.2	18.9	507
2004/05	70122.7	12.5	102560	14.7	32437.7	517993	13.5	19.8	6.3
2005/06	72282.7	3.1	110889	8.1	38607.1	630300	11.5	17.6	6.1
2006/07	87712.1	21.3	133605	20.5	45892.5	696989	12.6	19.2	6.6
2007/08	107623	22.7	163000	22	55377.3	781262	13.7	20.8	7
2008/09	143475	33.3	201966	34.7	76187.5	938671	15.3	23.4	8.1
2009/10	179946	25.4	259689	18.2	79743.3	1096038	16.4	23.7	7.3
2010/11	199819	11.1	295363	13.7	95544.4	1369431	14.5	21.5	6.9
2011/12	244374	22.3	339168	14.83	94794	1527344	15.91	22.2	6.2
2012/13	296021	21.1	358638	5.74	62617	1692643	17.48	21.18	3.69
2013/14	356620	20.5	435050	21.3	78430	1941624	18.36	22.4	4.03
2014/15	405866	13.80	531558	22.18	125692	2130150	19.05	24.95	5.90
2015/16	481962	18.74	601016	13.07	119054	2247422	21.44	26.74	5.29
2016/17	353910	20.50	400163		46253	2599234	13.4	15.39	1.77
Average Annual Growth Rate	185801. 9	16.59	250942. 4	31.4	62710.9	1170953.1	14.99	21.27	16.27

Source: Economic Surveys and NRB Reports of Nepal, (F/Y 2000/01-2016/17)

Figure 4.1

Different Scenario of Resource Gap



Source: Based on Table 4.1

In the above Table 4.1 the second column and the fourth column shows the trend in revenue and expenditure. The sixth column shows the revenue expenditure gap in which it can be seen the increasing tendency mainly because of increasing volume of total expenditure than revenue.

The amount of total expenditure was NRs. 79,835.1 million in F/Y 2000/01 has gone up to NRs. 601016 million in F/Y 2015/16; whereas total revenue has increased from NRs.48,893.6 million in F/Y 2000/01 to NRs. 481962 million in F/Y 2015/16. This shows the public expenditure has dominated to government revenue. Thus, the

revenue- expenditure gap is NRs. 30,941.5 million in F/Y 2000/01. Present research show that gap is increasing continuously increasing in each FY. In F/Y 2015/16 this gap has been NRs. 119054 million. This phenomenon tends to express that the resource gap is serious and perplexing issues in our country. It is one of the central issues as well as thread in Nepal.

The annual growth rate of government revenue and total expenditure is 14 percent and 20.5 percent in F/Y 2000/01 respectively but the annual growth rate of government revenue and total expenditure is 18.74 percent and 13.07 percent respectively in F/Y 2015/16. This indicates that there is considerable improvement in the allocation of government revenue as compared to F/Y 2000/01.

GDP has been increasing continuously from F/Y 2000/01 to F/Y 2015/16. GDP is the main indicator of the economic development that is why analysis of resource gap as percentage of GDP is more important. The revenue expenditure gap has been decreased from 7.9 percent in F/Y 2000/01 to 5.29 percent in F/Y 2015/16. Average annual growth rate of revenue expenditure gap as percentage of GDP is 6.27 percent.

## 4.1.3 Public Debt for Financing Fiscal Deficit

Public debt is the main source for financing fiscal deficit in Nepalese fiscal system and both internal and external sources of borrowing have been adopted in any underdeveloped economy for financing fiscal deficit, which is a common phenomenon in any underdeveloped economy. The total public debt has been increasing rapidly since the restoration of multiparty system.

Due to the rapid increasing in the government expenditure, public debt has become imperative in bridging the resource gap. The government has been unable to raise the revenue to meet the expenditure needed. Government of Nepal (GoN) collects revenue from two sources, namely tax revenue and non-tax revenue. Tax revenue stems from income tax on employees" salaries, profit of proprietorship firms and trade industries, house rent, capital gains, and other sources of income where as non-tax revenue stems from custom duties, land tax, fees and commission and so on. The state has not been able to collect tax revenue as expected due to several reasons; some of which are unstable political situation including week and frequently changing

government on-going conflicts, weaker performance of economy, weak management of particularly state owned enterprises and resources and rampant corruption in the bureaucracy etc. moreover, GoN has tried to please the general mass including trades, framers, employers and others by resorting to populist economic majors. We have noticed that government's words are louder than its actions. All these factors have contributed to the government's failure in collecting required revenue. This leaves with the government no other option than borrowing to need the revenue shortfall and the borrowing has taken place either within the country or from abroad.

The government meets the budgetary deficits by the following means:

Issuing money, Borrowing from home country and abroad, Grants and Drawing down on foreign exchange reserves

To meet the budgetary deficit, borrowing from home country and abroad is a better option than issuing money. Most of the governments do not want to finance the budgetary deficit by issuing money because it creates inflationary problem in the economy.

# 4.1.4 Growth Trend in Public Debt

Nepal is facing large and growing financial resource gap in the budgetary resource. In this context, the government borrowing both external and internal is needed for supplementing the resource gap.

Table 4.2

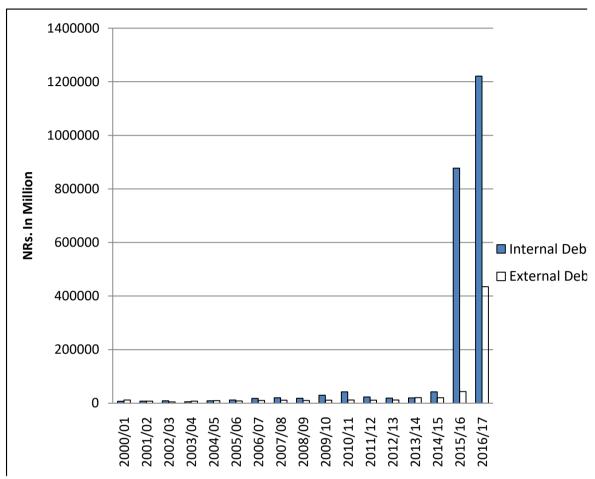
Trend of Government Debt and Annual Growth Rate (NRs. In Million)

F/Y	Internal Debt (ID)	Externa l Debt (ED)	Total Debt (TD)	% shar e of ID in TD	% shar e of ED in TD	GDP	ID as % of GDP	ED as % of GDP	TD as % of GDP
2000/01	7000	12044	19044	36.8	63.2	394052	1.78	3.06	4.83
2001/02	8000	7698.7	15698.7	51	49	425454	1.81	1.81	3.69
2002/03	8880	4546.4	13426.4	66.1	33.9	444052	2	1.02	3.02
2003/04	5607.8	7629	13236	42.4	57.6	473545	1.18	1.61	2.8
2004/05	8938.1	9266	18204.1	49.1	50.9	517993	1.73	1.79	3.51
2005/06	11834.2	8214.4	20048.6	59	41	630300	1.88	1.3	3.18
2006/07	17892.3	10053.5	27945.8	64	36	696989	2.57	1.44	4.01
2007/08	20500	11325.5	31825.5	64.4	35.6	781262	2.62	1.45	4.07
2008/09	18417.1	9968.9	28386	64.8	35.1	938671	1.96	1.06	3.02
2009/10	29914	11223.5	41137.4	72.7	27.3	1096038	2.72	1.02	3.75
2010/11	42515.8	12075.6	54591.6	77.8	22.1	1369431	3.1	1.1	3.9
2011/12	23419	11083	47502	76.66	23.33	1527344	2.38	0.73	3.11
2012/13	19043	11969	31012	61.4	38.6	1692643	1.12	0.71	1.83
2013/14	19980	21130	41110	48.6	51.4	1941624	1.02	1.08	2.11
2014/15	42368	20432	62800	67.46	32.53	2130150	1.988	0.96	2.948
2015/16	877755	43774	131549	66.72	33.27	2247422	3.90	3.90	5.85
2016/17	1221017	435054	1656071	73.74	26.4	2599234	2.107	1.38	3.47
Average Annual Growth Rate	140181.25	20440.2	132564.0	61.33	38.66	1170661.41	2.10	1.49	3.47

Source: Economic Surveys and NRB Reports of Nepal (CBS), (F/Y 2000/01-2016/17

Figure 4.2

Trend of Government Debt and Annual Growth Rate



Source: Based on Table 4.2

The government borrowing and annual growth rate from the period 2000/01 to 2015/16. Contribution of both external and internal debt to the total debt has been in the pace of increasing trend. The average annual growth rate as percentage share of internal debt and external debt to total debt is 56.5 percent and 42.92 percent respectively. The total debt has been increased from NRs. 19,044 million in F/Y 2000/01 to NRs.131549 million in F/Y 2015/16.

The share increased of internal debt and external debt as percentage of GDP is 1.78 percent and 3.06 percent respectively in F/Y 2000/01. This has been decreased to 3.9 and 1.94 respectively in F/Y 2013/14. The contribution of external debt has been decreased compared to internal debt in the study period from F/Y 2000/01 to 2015/16.

# 4.1.5 Pattern of Internal Net Outstanding Debt in Nepal

Nepal has started internal borrowing since F/Y 1961/62. Internal debt plays an significant role on cash flow management and to support the expenditure for betterment of the nation. Government is receiving internal debt from various sources by means of treasury bills, national saving certificates, development bonds and special bonds.

Table 4.3

Ownership Pattern of Government Bond and Treasury Bills

(NRs. In Million)

	1	1		1	1	1	(NRS. In Million)			
Fiscal Year	Treasur y Bills	Develo pment Bonds	National Saving Certificate	Special Bonds	Total Outstand ing Internal Debt	Percent Share of Treasur y Bills	Percent Share of Develop ment Bond	Percent Share of National Saving Certificate	Percent Share of Special Bond	
2000/01	21026.9	4262.2	11526.5	17541.4	54357	46	9.9	20.8	29.2	
2001/02	27610.8	5962.2	12476.4	13994.3	60043.7	56.3	15.2	15.8	19.2	
2002/03	48860.7	16059.2	9629.8	9164.5	83714.2	58.3	19.2	11.5	11.1	
2003/04	49429.6	17549.2	9029.8	8946.2	84954.8	58.2	20.7	10.6	10.8	
2004/05	51383.1	19999.2	6576.7	8176.3	86135.3	59.7	23.2	7.6	10.4	
2005/06	62970.3	17959.2	3876.8	8225.6	93031.9	67.7	19.3	4.2	8.8	
2006/07	74445.3	19177.1	1516.9	7245.7	102385	71.7	18.7	1.5	8.1	
2007/08	85033.1	21735.4	1116.9	5139.8	113025	72.2	19.8	0.9	4.2	
2008/09	86515.1	29478.5	216.9	5030	121241	71.3	24.3	0.1	4.1	
2009/10	102044	35519.4	0	5369.7	142933	71.4	24.9	0	3.7	
2010/11	120341	43519.4	10680	5029.1	179569	67	24.2	5.9	3.7	
2011/12	131624	57519.5	15680.1	502.87	214000	61.5	26.9	7.3	2.4	
2012/13	136468	51610.9	15680	1334.5	211900	64.4	24.5	7.4	0.6	
2013/14	136468	47110.9	16586.5	0	206700	66.02	22.8	8.02	0	
2014/15	1198581	57070.0	4871.1	4871.1	1983857	60.41	28.78	8.36	2.45	
2015/16	1150591	108900	4871.1	22973.7	229736.7	50.08	47.40	0.39	2.12	
2016/17	1030093	115900	16586.5	4871.1	240366.9	42.81	48.21	6.91	2.03	
Average Annual Growth Rate	265499.11	39372.48	8289.52	7553.87	247538.26	62.63	23.11	6.89	7.54	

Source: Economic Surveys and NRB Reports of Nepal (CBS), (F/Y 2000/01 - 2016/17)

The pattern of internal net outstanding internal debt in Nepal during the period F/Y 2000/01 to F/Y 2015/16 in which the government mainly mobilizes the internal resources by four sources. The contribution of treasury bills is larger because its average annual growth rate is 62.65 percent which is larger than others.

The percentage share of treasury bills, development bonds, national saving certificate and special bonds are 46 percent, 9.9 percent, 20.8 percent and 29.2 percent respectively in F/Y 2000/01. Present research shows that the share of treasury bills has dominated in the mobilization of internal debt. But the average annual growth rate of treasury bills, development bonds, national saving and special bonds are 62.63 percent, 23.11 percent, 6.89 percent and 8.9 percent which shows that the share of treasury bills has dominated in the mobilization of internal debt.

## 4.1.6 Pattern of External Debt in Nepal

The need of external borrowing is growing due to the revenue deficit. Internal debt is not sufficient to government for development activities. Due to the low resource mobilization the fund collection is inadequate. So, external debt is the most essential source of revenue to the government.

Table 4.4

Pattern of External Debt in Terms of Disbursement by Major Sources

(NRs. In Million)

Fiscal Year	Bilateral Debt	Multilate ral Debt	Total external Debt	Percent Share of Bilater al Debt	Percen t Share of Multila teral Debt	GDP	Bilateral Debt as percent of GDP	Multil ateral Debt as Percen t of GDP	Extern al Debt as Percen t of GDP
2000/01	586.7	11457.3	12044	4.9	95.1	394052	0.15	2.91	3.06
2001/02	87	7611.3	7698.6	1.1	98.9	425454	0.02	1.79	1.81
2002/03	657.2	3889.2	4546.4	14.5	85.5	444052	0.15	0.88	1.02
2003/04	66	7563.2	7629	0.9	99.1	473545	0.01	1.6	1.61
2004/05	126.5	9139.6	9266.1	1.4	98.6	517993	0.02	1.76	1.79
2005/06	40.6	8173.7	8214.3	0.5	99.5	630300	0.01	1.3	1.3
2006/07	9004.6	1048.9	10053.5	89.6	10.4	696989	1.29	0.15	1.44
2007/08	632.1	8347.8	8979.9	7	92.9	781262	0.08	1.71	1.14
2008/09	612.9	9356	9968.9	6.1	93.9	938671	0.07	0.99	1.06
2009/10	4550.6	6672.8	11223.4	40.5	59.5	1096038	0.4	0.6	1.02
2010/11	4823.7	7251.9	12075.6	39.9	60.6	1369431	0.3	0.5	1.01
2011/12	3254.4	7828.7	11083	29.4	70.6	1527344	0.21	0.51	0.72
2012/13	2574.4	9394.9	11969	21.5	78.5	1692643	0.15	0.56	0.71
2013/14	1573.7	19556.9	21130	7.4	92.6	1928517	0.08	1.01	1.1
2014/15	3427.6	22188.0	25615.60	13.38	86.64	2130150	0.16	1.16	1.20
2015/16	3201.5	30026.8	33228.3	9.6	90.36	2247422	0.14	1.33	1.47
2016/17	94905.0	71526.4	166431.4	57.02	42.98	2599234	3.65	2.70	6.403
Average Annual Growth Rate	7654.38	14178.42	11677.28	18.91	81.12	928351	0.21	1.16	1.34

Source: Economic Surveys of Nepal (MoF), (F/Y 2000/01 – 2016/17)

The pattern of external debt in terms of disbursement by significance sources. Bilateral loan is in decreasing trend and multilateral loan is in increasing trend and it also reflects that the total external debt is increasing.

External debt is NRs. 12,044 million in F/Y 2000/01 which is increased to NRs. 33228.3 million in F/Y 2015/16. The average annual growth rate of bilateral debt and multilateral debt is 17.98 percent and 82.04 percent respectively.

## 4.8 Net Outstanding Debt

Net outstanding total debt means both internal and external debt after deducting repayment of principal and interest. Nepalese government has to borrow large amount of loans to meet the financial resource gap. There is increasing trend of total net outstanding public debt in each year.

Table 4.5

Net Outstanding Public Debt to GDP Ratio

(NRs. In Million)

F/Y	Outstanding ID	Outstan ding ED	Total Outstanding Debt	GDP	ID as % of GDP	ED as % of GDP	Total Debt as % of GDP
2000/01	54357	200404	255908	394052	13.8	50.9	64.9
2001/02	60043.7	220126	280169	425454	14.1	51.7	65.9
2002/03	73620.7	223433	297054	444052	16.6	50.3	66.9
2003/04	84645.3	232779	317425	473545	17.9	49.2	67.1
2004/05	86133.7	219642	305776	517993	16.6	42.4	59
2005/06	87564.2	233969	321533	630300	13.9	37.1	51
2006/07	93031.9	216201	309233	696989	13.3	31	44.4
2007/08	111239	242061	353300	781262	14.2	30.9	45.1
2008/09	121241	277040	398281	938671	12.9	29.5	42.4
2009/10	142933	256243	399176	1096038	13	23.4	36.4
2010/11	179569	262252	441821	1369431	13.1	19.1	32.2
2011/12	214000	309300	523200	1527344	14	20.2	34.3
2012/13	211900	333400	545300	1692643	12.5	19.7	32.2
2013/14	206700	346800	553500	1928517	10.5	17.9	28.5
2014/15	201657	343262	544919	2130150	9.47	16.11	25.58
2015/16	239029	348760	627789	2247422	10.63	17.29	27.93
2016/17	233226	391280	624510	2599234	8.97	15.05	24.02
Average Annual Growth Rate					13.53	32.06	45.23

Source: Economic Surveys of Nepal (MoF), (F/Y 2000/01-2016/17)

The net outstanding public debt. Both net outstanding internal and external public debt are increasing in each FY. In F/Y 2000/01, net outstanding internal and external debt is NRs. 54,337 million and NRs.200,404.4 million respectively. In F/Y 2013/14, net outstanding internal and external debt has been increased to NRs. 206,700 million and NRs. 346,800 million respectively.

The average annual growth rate of internal and external debt as percentage of GDP is 14.01 percent and 33.81 percent respectively. The net outstanding debt share of external source is larger than internal sources. Hence, this shows that external debt dependency is increasing each year.

### 4.1.7 Public Debt as Percentage of Fiscal Deficit

In Fiscal system of Nepal, the fiscal deficit is financed through both internal and external borrowing. Since the government expenditure is rapidly increasing which is unable to raise revenue accordingly. Thus, accumulation of debt is mainly for financing the deficit. The internal and external debt a percentage of fiscal deficit is shown in Table 4.6 and Figure 4.4.

Table 4.6
Percentage of Debt in Fiscal Deficit

(NRs. In Million)

F/Y	Internal Debt(ID)	External Debt(ED)	Total Debt	Fiscal Deficit	Foreign Grants	Annua l growth rate of Deficit	ID as Percen t of Deficit	ED as Percen t of Deficit
2000/01	7000	12044	19044	24188.1	6753.4	32.3	22.6	38.9
2001/02	8000	7698.7	15698.7	22940.6	6686.2	-4.2	27	26
2002/03	8880	4546.4	13426.4	16437.1	11339.1	-6.2	32	16.4
2003/04	5607	7629	13236	15828.2	11283.4	-2.4	20.7	28.1
2004/05	8938.1	9266	18204.1	18046.5	14391.2	19.6	27.6	28.6
2005/06	11834.2	8214.4	20048.6	24779.6	13827.5	19	30.7	21.3
2006/07	17892.3	10053.5	27945.8	30091.7	15800.8	21.4	39	21.9
2007/08	20500	11325.5	31825.5	32642	20735.3	8.47	62.8	34.7
2008/09	18417.1	9968.9	28386	49804.7	26382.8	52.6	36.9	20
2009/10	29914	11223.4	41137.4	41197.4	38546	-17.3	72.6	27.2
2010/11	42515.8	12075.6	54591.4	48669.1	57997.8	10.1	87.3	24.8
2011/12	36419	11083	47502	51184	40812	5.16	71.2	21.7
2012/13	19043	11969	31012	24170	35229	-51.72	77.1	48.4
2013/14	19980	21130	41110	38150	33960	54.39	52.4	55.4
2014/15	42368	20432	62800	125692	36374	299.0	33.70	16.25
2015/16	87775	43774	131549	119054	32478	5.28	73.72	36.76
2016/17	2332226	166431.4	399657	46253	10298	203.8	50.42	35.982
Average Annual Growth Rate						27.89	47.95	2917

Source: Economic Surveys of Nepal (MoF), (F/Y 2000/01- 2016/17)

3% 2% 2% **2000/01** 6% **2001/02 2002/03** 16% 3% **2003/04 2004/05** 4% **2005/06** 4% **2006/07 2007/08 2008/09** 7% 17% **2009/10 2010/11** 6% **2011/12 2012/13** 7% 5% **2013/14** 7% 3%

Figure 4.3

Percentage of Debt in Fiscal Deficit

Source: Based on Table 4.6

Total public debt in F/Y2000/01 is NRs.19, 044 million which has been increased to NRs. 41,110 million in F/Y 2013/14. In F/Y 2013/14 both internal and external debt are increased to NRs. 19,980 million and NRs. 21,130 million respectively. The fiscal deficit has been increased to NRs. 38,150 million from NRs. 24,188.1 million.

The internal debt has occupied 22.6 percent of deficit whereas the external debt has occupied 38.9 percent of fiscal deficit in F/Y 2000/01. But in F/Y 2013/14 the internal debt has occupied 52.4 percent of fiscal deficit whereas the external debt has occupied 55.4 percent of fiscal deficit

#### 4.1.8 Share of External and Internal Debt Servicing as Percentage of GDP

Debt servicing of foreign loan entails double burden First, debt servicing has the primary claim upon the allocation of national budget. To that extent priority for economic activities such as drinking water, health, irrigation, road, education, and electricity are deprived of resources. On the other hand, debt servicing of external

debt involves the scarcest resource, the foreign exchange. It curbs the capacity to import capital goods needed for the country. Foreign loan share is rapidly increasing which increase financial and real burden for the future generation. So the debt servicing is one of the problems of Nepalese economy because most of the portion of revenue has been used to pay the interest of internal and external debt.

Ratio of internal and external debt servicing to total debt servicing and their percentage share to GDP during the period from F/Y 2000/01 to F/Y 2013/14.

Table 4.7
Internal and External Debt Servicing in Nepal

(NRs. In Million)

F/Y	Internal Debt Servicing (IDS)	External Debt Servicing (EDS)	Total Debt Servicing (TDS)	GDP	IDS as % of GDP	EDS as % of GDP	TDS as % of GD
2000/01	4193.2	6201.4	10394.6	394052	1.1	1.6	2.6
2001/02	5637.8	6567.5	12205.3	425454	1.3	1.5	2.9
2002/03	8663.4	7519.2	16182.6	444052	2	1.7	3.6
2003/04	9424.9	7908.9	17338.8	473545	2	1.7	3.7
2004/05	11651.4	8099.9	19751.3	517993	2.3	1.6	3.8
2005/06	11271.7	9150.8	20423.5	630300	1.8	1.5	3.3
2006/07	13321.8	9594.5	22916.3	696989	1.9	1.4	3.3
2007/08	15900.7	10014.7	25915.4	781262	2	1.3	3.3
2008/09	8713.8	12494	21207.8	938671	0.9	1.3	2.3
2009/10	7689.3	13201.1	20890.4	1096038	0.7	1.2	1.9
2010/11	5574.1	13481.1	19055.2	1369431	0.4	0.9	1.3
2011/12	6626.8	13532.4	20159.2	1527344	0.4	0.9	1.3
2012/13	20940.1	14190.1	35130.2	1692643	1.2	0.8	2.1
2013/14	25152.5	16724.6	41877	1941624	1.3	0.9	2.2
2014/15	47429.9	17041.8	64471.7	2130150	2.22	0.80	3.02
2015/16	50334.9	17795.0	68129.9	2247422	2.23	0.79	3.03
2016/17	17975	9803	27777	2599234	0.69	0.37	1.06
Average Annual Growth Rate	57975	19803	77778		1.48	1.24	2.72

Source: Economic Surveys of Nepal (MoF), (F/Y 2000/01 – 2016/17)

Table 4.7 shows the ratio of internal and external debt servicing to total debt servicing and their percentage share to GDP during the period from F/Y 2000/01 to F/Y 2015/16. Table 4.7 shows that the total debt servicing is increasing rapidly. In the F/Y 2000/01, total debt servicing was NRs. 10,394.6 million which has increased to NRs. 68129.9 million in F/Y 2015/16.

The increasing trend of internal debt servicing is greater than external debt servicing. The average annual growth rate of internal debt servicing as percentage of GDP is 41.48 percent, external debt servicing as percentage of GDP is 41.48 percent and total debt servicing as percentage of GDP is 2.72 percent which shows that the burden of internal debt servicing is growing rapidly than the burden of external debt servicing. Thus to remove this problem of burden proper debt management is necessary in Nepal.

Note: External Debt Servicing= Repayment + Interest Payment

Internal Debt Servicing – Total Debt Servicing – External Debt Servicing

Total Debt Servicing= Interest Payment + Principal Repayment

#### 4.1.9 Trend of Regular Expenditure and Debt Servicing

In annual budgetary process the total debt servicing is a part of regular expenditure. The process of debt servicing has burden on the regular expenditure. The effect is on the head of people of Nepal. Total debt servicing and total external debt servicing and their percentage share in regular expenditure.

Table 4.8

Regular Expenditure and Debt Servicing

(NRs. in Million)

Fiscal Year	Regular Expenditur e(R.E.)	Annual Growth Rate of R.E.	Total Debt Servicing	External Debt Servicing	Total Debt Servicing as percent of R.E.	External Debt Servicing as percent of R.E.
2000/01	42769.2	23.9	10394.6	6201.4	24.3	14.5
2001/02	48590	13.6	12205.3	6567.5	25	13.5
2002/03	54973	13.2	16182.6	7519.2	29.4	13.7
2003/04	55552.1	1.1	17338.8	7908.9	31.2	17.3
2004/05	61686.4	11.1	19751.3	8099.9	25.4	13.1
2005/06	67017.8	8.6	20423.5	9150.8	23.1	8.2
2006/07	77122.4	15.1	22916.3	9594.5	29.7	12.4
2007/08	98172.5	27.3	25915.4	10014.7	26.4	10.2
2008/09	127738.9	30.1	21207.8	12494	16.6	9.8
2009/10	151019.1	18.2	20890.4	13201.1	13.8	8.7
2010/11	168824.2	11.7	19055.2	13481.1	11.2	7.9
2011/12	243460	15.8	20159.2	13532.4	8.28	5.6
2012/13	247455.5	1.6	35130.2	14190.1	14.2	5.7
2013/14	303531.8	22.7	41877	16724.6	13.8	5.5
2014/15	244985.6	19.288	64471.7	17041.8	26.31	6.95
2015/16	257259.4	5.01	68129.9	17795.0	26.78	6.91
2016/17	212624.2	17.33	27777	9803	13.06	4.61
Average Annual Growth Rate		14.89			21.57	9.9975

Source: Economic Surveys of Nepal (MoF), (F/Y 2000/01-2016/17)

In the F/Y 2000/01 total debt servicing was NRs. 10,394.6 million which was 24.3 percent of regular expenditure of that year. Total debt servicing was increased and reached 26.48 percent of regular expenditure in F/Y 2015/16. The average annual growth rate of regular expenditure is 14.89 percent which is greater than the average annual growth rate of external debt servicing as percentage of regular expenditure.

## 4.1.10 Trend of Foreign Aid in Development Plan

The contribution of public debt in the public sector development expenditures of the different plan periods. The trends of foreign aid in different development planning are as follow.

Table 4.9

Share of Foreign Aid in Development Expenditures in Economic Plans

(NRs. In Million)

Periodic Plans	Development Expenditure	Foreign Aid	Foreign Aid as percent of Dev. Exp.
First Plan ( 1956-61)	382.9	382.9	100
Second Plan(1962-65)	614.7	478.3	77.8
Third Plan(1965-70)	1639.1	919.8	56.1
Forth Plan(1970-75)	3356.9	1509.1	45
Fifth Plan( 1975-80)	8870.6	4264.1	48.1
Sixth Plan( 1980-85)	21750	13260	60.1
Seventh Plan( 1985-90)	29000	20480	70.6
Eighth Plan( 1992-97)	113519.1	74355	65.5
Ninth Plan( 1997-2002)	189580	111548	58.8
Tenth Plan ( 2002-2007)	234029	127311.7	54.4
Three Year Interim Plan ( 2007/08- 2009/10)	178990	140660	78.6
Three Year Plan (2010/11- 2012/13)	364340	249280	68.42

Source: Periodic Plans of Nepal (NPC (1956-2013)

The contribution of aid as percentage of development expenditure has gradually declined from 100 percent in the First Plan to 45 percent in the Forth plan. It increased gradually then reached 65.5 percent and 58.8 percent in the Eight Plan and Ninth Plan respectively. Then it is decreased to 54.4 percent in the Tenth plan. The portion of foreign aid in the development expenditure in the Three Year Interim Plan estimated to be 78.6 percent.

## 4.1.11 Internal Debt Instruments of Nepalese Government

At present, there are five types of domestic borrowing instruments, which are development bonds, National saving s certificates, Citizen saving certificates, Special bonds, Treasury bill.

#### (i) Treasury Bills

Treasury bills are short term obligations of up to one year. The government has issued 28 days, 91 days, 182 days and 364 days treasury bills. They are issued on the auction as specified in the issue calendar. NRB prepares public debt calendar including the schedule of servicing amount of previously raised loan and the additional amount of accorded by government. The treasury bill most of the time purchased by Commercial banks as a competitive bidders. At least 15 percent of offered amount has to be separated for non-competitive bidders and they should purchase the bill at average discount rate. It should be noted that commercial banks are not allowed to take part as non-competitors.

Treasury bills are issued on every Tuesday. Before one week of issuing Treasury Bills, the notice of auction would be published in the national daily newspaper mentioning the necessary terms like series number, offered amount, taxable/non-taxable, maturity period, earnest money, issue date, bidding time and other conditions. The information would also provide by website by NRB (www.nrb.org.com).

The lender form can be obtained at any branches of NRB and it is to be submitted to the department in the valley and to the branches of NRB in out of the valley within Monday. Investor can apply for minimum Rs. 25000. Investor should enclose original credit voucher as for "earnest money" amounting 2.5 percent of required amount to an auction deposit "sundry creditors main account". Deposit can be made at any banking

branches of NRB. The succeeded competitor will be notice to deposit the cash instantly and rejected person get back their respective earnest money. Treasury bills are issued at the discount rate declared by the auction system and redeemed at par (value) that is offered amount would be paid off by the maturity of the bill (Paudel, 2016).

#### (ii) Development Bonds

It was started to publish from 1963. Initially it was issued in face value at the predetermined interest rate. After 2005 it was starts to issue on auction. It is divided into competitive and non-competitive categories dividing at least 15 percent for non-competitive bidders. The notice would be public in newspaper with special features and also put in NRB website. Development bond can be purchase by minimum Rs. 25000 and up to rupees exactly divisible by Rs. 25000.

#### (iii) National Saving Certificate and Citizen Saving Certificate

The main aim of these saving certificates is to mobilize small savings. These are generally non-marketable and tax exempted debt instruments for the public. However, in Nepal these two saving certificate are marketable and taxable securities at the moment. These certificates are sold in face value with pre-determined interest rate. For the issuance, notice with necessary terms and condition would be published in newspaper. There are some differences between these two saving certificates. Citizen Saving Certificates can only be purchase by people where as National Saving Certificate can be can be purchased by both people and banking and non-banking institution. Both saving certificates are issued in form of promissory notes and stock. Ownership of promissory type certificate can be transferred by simple process of signature endorsement between buyers and sellers.

These certificates are recorded in NRB"s (issuing authority) to their signature verification. On the other hand, stock type's certificate can't be sold by holders simply by endorsement process as they are registered in issue offices. Saving certificate holder has to come to the issue office with buyer for the signature verification. This signature verification is done by NRB, public debt management development department, which is the debt manager of the government.

These saving certificates can be purchase by minimum amount of Rs. 1000 and of maximum amount exactly divisible by Rs. 1000 but not more than stipulated amount. Annual interest of these saving certificates can be received on fixed interest rate in each 6/6 month from NRB, commercial banks, banking branches of agriculture development bank and fixed interest rate and market price.

# 4.1. 12 Situation of Debt Trap in Nepal

The condition of debt trap is the great challenge for developing countries like Nepal. When the country loses principal payment capacity and interest payment capacity there raises a situation that whole-borrowed money will be used for debt obligation payment. Nepal faces the problem of fiscal deficit.

Nepal is facing over increasing problem of resources gap. It has such situation because of productivity very low, less contribution by annually ever growing labor force, low quality of human resource available, a traditional nature in tax administration, the inflow of easy money through various channels, sluggish change in the traditional economic structure and extreme capital deficiency

Now a day's foreign assistance is seen so essential that each sector of the economy is wholly dependent on it in Nepal. Above tables shows the trend of average internal public debt is 19 percent of GDP, but external public debt is 48.42 percent of GDP. It has the great place as a source of financing trade deficit, fiscal deficit as development expenditure is increasing day by day.

Present scenario shows that the outstanding public debt is nearly 26.89 percent of GDP in one hand, and debt servicing to GDP ratio is nearly 1.63 percent. This shows that debt is mounted in very high amount in each year. Corruption and use of low quality manpower misuse the high amount of aid. Aid projects are implemented on the donor priorities.

There are neither scientific systems of aid are effective nor productive. Due to such weakness, the government of Nepal would fall into debt trap. This happens when:

- a) Borrowed money is used for repayment of principal and payment of interest.
- b) Large amount of loan is allocated for regular expenses.
- c) The borrowed amount exceeds the debt bearing capacity of the country or the maximum legal limit (1-2 percent of GDP for internal debt).
- d) High portion of loan is set-aside for meeting current expenditure.

From the above analysis we can also find that growth rate of GDP is more than growth rate of external debt. Also, we do not only look on large volume of external debt. We have to relatively analyze about what is the impact of external debt on altogether development of economy. To analyze the debt trap, we have to give sharp sight on national income, growth of production level, infrastructure development, foreign exchange earnings, and BOP situation, effect on internal public revenue, capital formation, human development, poverty elevation, sustainable development, industrialization, and exchange rate. From relative analysis we can see positive trends on these sectors. So, external debt has positive impact on these sectors. Most of the foreign debt received by Nepal was of average 1 percent yearly interest rate and of long run maturity. This provide sufficient period for debt servicing. Also 36 countries of the world were fallen in to the category of heavily indebted countries as classified by IMF and WB. But Nepal is not included in that list by IMF and WB. This also shows that Nepal has not fallen in debt trap.

Also, up to this period, Nepal has paid matured principal and interest on the time. Still, it had not taken new loan to pay previous one. All these shows Nepal has not fall in debt trap still. But, there also exist many problems in external debt management in Nepal. The leakages, corruption, inefficient and less productive use of public debt are problems exist in external debt management, hence, we are also in critical situation and if we do not improve it, we may fall in debt trap in near feature (paudel, 2016). The condition of debt trap is the great challenge for developing countries like Nepal. When the country loses principal payment capacity and interest payment capacity, there arise a situation that whole-borrowed money will be used for

debt obligation payment. Nepal faces the problem of fiscal deficit. Nepal is facing over increasing problem of resource gap. It has such situation due to less contribution by annually ever growing labor force, low quality of human resource available, Productivity is very low, sluggish change in the traditional economic structure and a traditional nature in tax administration

# 4.2 Burden of Public Debt in Nepal

Underdeveloped countries like Nepal lack the formation of adequate domestic capital to funds development needs. Moreover, these countries are facing the shortage of foreign exchange for importation of capital goods, thereby requiring such countries to resort to public debts from internal as well as external sources such as bilateral and multilateral agencies to break the vicious circle of insufficient capital formation and development bottlenecks. The scope for domestic borrowing in these countries is very limited, because internal resources are scare. Therefore, only external borrowing remains the viable alternative to be undertaken by these countries. Nepal is facing various problems such as poverty, unemployment, internal conflict, political uncertainty and breakdown of law and order etc. and Nepal's macroeconomic indicators show negative/marginal growth and declining economic performance. Nepal's human development index 0.558 as per Nepal Human Development Report 2017, UNDP. This index highlights acute level of human development in Nepal. Recently, Nepal has been incurring huge amount of expenditure for security, which is unproductive from development perspective. There is deficit in our current year's budget and revenue is not increasing. Due to this reason, Nepal will have to depend upon foreign assistance and external loans.

Burden of public debt is increasing very rapidly in our country; it indicates that the sacrifice and effect on the community through a rise in taxation at the time of repayment and for paying the annual interests on the governments loan. In other words, it refers every government is bound to repay the public borrowing whether internally or externally with interest may tend to fall either on the obligation of repayment including with interest. Government borrowing has been excessive and the burden of public debt is increasing day by day. The total burden of public debt can be classified into two groups, burden of internal debt and external debt.

Internal debt refers to the debt held internally by the persons or institutions with in the area controlled by the public authority. Classical economists were against all types of public debt. They were of the view that if debt is inevitable, they should be paid off as soon as possible it is sometime argued that there is some upper limit to the public debt, beyond which the debt becomes so burdensome that the economy may be open to the risk of bankruptcy. They viewed if the borrowed fund is spent on the productive purpose, it will generate the income and the rate of capital formation will increase.

The external debt is quite different from that of the internal debt. It refers to the money borrowed from foreign countries. External debt poses real burden on the economy by losing the economic welfare of the debater community. The process goes for a long time until the loan is cleared because the debater country has to pay not only the loan but also the interest charge on it. The debt will be less burdensome to the community if it is used for productive purpose so that the balance of payment of the nation will be on its favor. If the debt is used ineffectively, it will certainly create the problem like "debt trap" and problem of the balance of payments.

There is always debate among the economists in case of the shifted burden of public debt to the future generation. Some of the economists have viewed, if the present generations reduce their saving in order to meet the debt finance and leave a smaller amount of capital resource for the future, this will reduce the productive capacity of the coming generation and they will accordingly lose. In this way, burden of debt may push on to the future generation. But some economists have challenged the above version and opposite opinion on the subject of burden of public debt. They submit that there is no shift of the basic burden to the future generation because the state posterity which pays the additional taxes will be benefited from the repayment of the debt.

In case of Nepal, outstanding of public debt is increasing rapidly each year. Large scale of public debts have been incurred in the past for financing development programs, but debt servicing capacity has not increased in the same pace so that there may be undue strain in the balance of payment owing to out flow of funds through debt services. Nepal has been borrowing new fresh

loans to repay old loans. This also has alarmed situation of debt trap in the future. Hence, proper utilization of debt is necessary to reduce the debt burden.

## 4.3 Relation between GDP and Public Debt in Nepal

Regression equation is used to analyze the cause and effect relationship between GDP and internal debt (ID) and external debt (ED). To identify the validity of regression estimates and the value of the parameters, various statistical tests have been used. On the basis of the values of the parameters, we have analyzed the structure, trend and burden external and internal debt on the economic development of Nepal.

#### • Relation between GDP and Internal Debt in Nepal

This analysis shows the relationship between GDP and Internal Debt bu=y using the regression equation Y on  $X_1$  which is as:

$$Y = a_0 + a_1 X_1$$

Where, Y = GDP (Dependent Variables)

 $X_1$  = Internal Debt (Independent Variable)

 $a_0$ ,  $a_1$  = Regression parameters

The result of this regression model is:

 $Y = 98.61 + 46.63 X_1$ 

 $R^2 = 0.708$  F- test = 16.92

#### • Interpretation of the Results

The fitted equation above shows that there is positive relationship between GDP (Y) and Internal Debt (ID) which means when Internal Debt increases the GDP increases. The coefficient of determination R<sup>2</sup> is 0.688 which means 70.8 percent of variation of GDP (Y) is determined by the explanatory variable i.e. Internal Debt. This means that 29.2 percent of the variation in GDP cannot be explained by Internal Debt alone. Therefore, there must be other variables that have an

influence. Similarly, the calculated F- value is 28.5 at 5 percent level of significant which is greater than tabulated F- value 4.75 which implies that the model is statistically significant.

#### • Relationship between GDP and External Debt in Nepal

This analysis shows the relationship between GDP and External Debt by using the regression equation Y on  $X_2$  which is as:

$$Y = a_0 + a_1 X_2$$

Where, Y= GDP (Dependent Variable)

 $X_2$  = External Debt (Independent Variable)

 $a_0$ ,  $a_1$  = Regression Parameters

The result of this regression model is:

$$Y = -200.0 + 110.74 X^2$$

$$R^2 = 0.673$$
 F- test = 16.92

#### • Interpretation of the Results

The estimated coefficients of the above equation have expected sign. Both the coefficients are statistically significant at 5 percent level. The coefficient of determination is 0.673 which shows that 67.3 percent of variation of GDP is determined by External Debt. Hence, the growth in External Debt have positive impact in the growth of output., this relationship is statistically significant as the calculated value F- value is 16.92 at 5 percent level of significance which is slightly greater than the tabulated F- value.

#### • Relation between GDP and Total Debt in Nepal

This analysis shows that the relationship between GDP and Total Debt by using the following regression equation:

Regression equation Y on X is

$$Y = a_0 + a_1 X$$

Where, Y= GDP (Dependent Variable)

X= Total Debt (Independent Variable)

The result of this equation is

$$Y = 15.82 + 35.69 X$$

$$R^2 = 0.749$$
 F- test = 24.88

## • Interpretation of the Results

The fitted equation shows that there is positive relation between GDP and Total Debt which means when total debt increases then GDP also increases. The coefficient of determination is 0.749 which means that 74.9 percent of variation of GDP is determined by Total Debt. Similarly, the calculated F- value is 24.28 which is greater than tabulated F- value which implies that the model is statistically significant.

The analysis of this chapter reveals that there exist significant positive relationship between External Debt, Internal Debt and total Debt with GDP

# CHAPTER V

# SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

## **5.1 Summary of Findings**

Public debt in Nepal: An analysis of trend its structure, trend and burden is representative vision of the reality. The main thrust of the study is to analyze the structure and pattern of public debt in Nepal and to show the relationship. Nepal is in critical phase of managing public finance because of inadequacy of internal resources. The Fiscal deficit has been increasing in every fiscal year. The government borrows for financing the budgetary deficit and helps to achieve a higher growth rate of the economy. The government expenditure mainly regular expenditure is increasing rapidly but revenue is not increasing in the same rate. The landlocked nature and mountainous topography are the major constraints for development of Nepal. Economically, Nepal is backward and its economic performance is not satisfactory. Nepalese government is facing an acute resource gap problem which is also being expected to grow in coming years. Nepal is demanding more and more financial resources through public debt to bridge the growing resource gap in the budget.

Borrowing is taking from two sources internal and external. In the internal source treasury bills, development bonds, special bonds and national saving certificate are included. Similarly, in external sources Nepal is receiving borrowing in the form of bilateral and multilateral sources as ADB, UNDP, WB, WHO, IMF etc. For Nepal, both internal and external debt plays a significant role as a means of financing economic development. Public borrowing has to be undertaken within the country as well as abroad. Only through internal sources, it is not sufficient to promote the rapid development of the Nepalese economy. Thus, external debt financing contributes significantly to the external development of Nepal.

Data shows that internal and external debt has been increasing rapidly but external borrowing is more vigorous than internal borrowing. The share of outstanding external debt in total outstanding debt is more than the internal debt. It seems that government could not raise enough internal borrowing due to its limited sources and the presence of non-monetized sectors.

Government should be responsible to utilize the public debt in productive sector rather than unproductive sectors. The government regulates the better fiscal policy and concern in the proper implementation.

#### Major findings are as follows:

- In the study period from F/Y 2000/01 to F/Y 2016/17, the government revenue has increased from NRs. 48,893.6 million to NRs. 353,910 million with the average annual growth rate of 16.64 percent in revenue. In the same period, the expenditure has increased from NRs. 79,835.1 million to NRs. 400163 million the average annual growth rate of 15.07 percent. But the growth rate of revenue is not sufficient for financing the increased government expenditure..
- The economic growth of country depends on the amount invested in the development activities. If the budget analyzed of Nepal it is found that the share of development expenditure is increasing while the share of regular expenditure is increasing.
- The amount of internal debt was NRs. 7,000 million in F/Y 2000/01 and it has increased to NRs. 1221017 million in F/Y 2016/17. Similarly, the amount of external debt was NRs. 12,044 million in F/Y 2000/01 and it has increased to NRs. 435054 million in F/Y 2016/17. Percentage share of internal debt and total debt in F/Y 2000/01 was 36.8 and 73.74 percent respectively. The share of internal debt and external debt has reached to 56.5 and 42.92 percent respectively. But the average annual growth rate of internal debt and external debt during the study period is 56.5 and 42.92 percent. Thus the portion of internal debt has been increasing in average.
- Average annual growth rate of total external debt as a percentage of GDP is 1.34 percent
  where as the percentage hare of bilateral and multilateral debt is 0.21 and 1.16 percent
  respectively. This shows that the external debt is heavily dependent upon multilateral
  sources.

- In the study period from F/Y 2000/01 to F/Y 2016/17, the gap between revenue and expenditure has increased from NRs. 30,941.5 million to NRs. 46253 million. The resource gap has been increasing in each year that shows there is excessive increase in government expenditure than government revenue which leads the resource gap
- Total external debt was NRs.12, 044 million in F/Y 2000/01 in which NRs. 586.7 million was taken from bilateral and NRs. 11,457.3 million from multilateral sources. It has gone up to NRs. 435054 million where NRs. 94905 million from bilateral and NRs. 71526.4 million from multilateral sources. In the study period the share of bilateral debt is 18.91 percent and the share of multilateral debt is 81.12 percent.
- The outstanding internal and external debt in F/Y 2000/01 was NRs. 4,357 million and NRs. 200,404.4 million respectively. But in F/Y 2016/17 both outstanding internal and external debt is NRs. 233226 million and NRs. 391280 million respectively. The average annual growth rate of internal and external debt as percentage of GDP is 13.53 and 32.06 percent respectively.
- Development expenditure has been increasing in each plan period. In the First Plan development expenditure was NRs. 382.9 million which is increased to NRs. 364,340 million in the Twelfth Three Year Plan. Foreign Aid is also increasing from NRs. 382.9 million in the First Plan to NRs. 249,280 million in the Twelfth Three Year Plan which is 68.42 percent of development expenditure.
- In F/Y 2000/01, fiscal deficit was NRs. 24188.1 million which is increased to NRs. 46253 million in F/Y 2016/17. The fiscal deficit is increasing in each fiscal year. The average annual growth rate of fiscal deficit is 27.89 percent.
- The total debt servicing was NRs. 10,394.6 million in F/Y 2000/01 which has increased to NRs. 27777 million in F/Y 2016/17. During the period between F/Y 2000/01 to F/Y 2016/17, the average annual growth rate of total debt servicing as percentage of GDP is 2.69 percent. In that period the average annual share of internal debt servicing is more than external debt servicing.

#### **5.2 Conclusion**

Public debt in Nepal: An analysis of trend its structure, trend and burden is representative vision of the reality. The main concern of the study is to analyze the structure and pattern of public debt in Nepal and to show the relationship.

The condition of indebtedness of the external debt has increased, due to the poor- mobilization of internal resources, widening investment saving gap, export import gap, revenue expenditure gap and large amount of fiscal deficit. So there has been excessive flow of foreign loans to bridge up these gaps. Consequently, burden of debt and debt servicing obligation are increasing rapidly in each year but debt servicing capacity of the economy is not increasing the same pace.

Present research has analyzed the role, structure and trend of public debt on the economic development of Nepal. The government expenditure has increased more rapidly than government revenue. So the government has borrowed from internal and external sources. The growing trend of borrowing creates a great problem for debt management and becoming a major challenge issue for the country. The borrowing money is unlikely financed on the non-monetized and unproductive sectors of the economy which in turn has the burden for the economy.

Present research has found that government borrowing has increased unlikely and financed mostly on the unproductive sectors and hence government always lacks resources then takes the new loan to pay the previous ones. That's why the public debt and it interest is mounting rapidly but addressing capacity for redemption the debt is not increasing in the same pace.

Present research clearly shows that the average annual share of outstanding debt as a percentage of GDP is almost 47.88 percent. It concluded that we are entrapped in the debt net. If debt management is not set effectively and effective programs for debt financing are not carried out we shall not escape from the situation of debt trap.

The empirical results confirm that stock of internal, external and total debt has not caused negative impacts on GDP growth of Nepal. It is better to take the loan for the economic development but it should be properly utilized on productive sectors otherwise debt-trap will drag us to the path of difficult situation from where we cannot escape from it.

#### **5.3 Recommendations**

On the basis of above findings, the following are the purpose recommendations which can be helpful to address the problems of public debt financing in Nepal.

- Government should maintain fiscal balance by applying strong fiscal and monetary
  policy. The size of revenue collection is very low and expenditure is very high which
  creates fiscal imbalance. This has lead to heavy borrowing from internal and the volume
  of borrowing and maximizing revenue collection government should adopt transparent
  and effective tax policy by improving tax administration.
- Government should try to receive more grants rather loans. The government should try to get the rants more and more as far as possible. There is more domination on bilateral grants. The government should maintain such external policy so that more grants should be received rather than the loans.
- Government should increase the debt servicing capacity of the country. To increase the Debt servicing capacity, Government should increase GDP growth, revenue growth and export earnings growth in sustainable path so that country will not trapped on the debt servicing problem Government should be conscious about falling the country into debt trap.
- Proper attention should be given to the macro- economic stability of the country. Nepal has so many under-developed areas, where the role of government is dominating. Government should maintain the balance between urban and rural areas, agricultural and industrial sectors, trades and non- traded sector. The maintenance of such various imbalanced sectors of the economy should be done through control of unproductive expenditure, big push through capital and proper utilization of resources of the under-developed areas.

#### REFERENCES

- Acharya, B.P. (2005). *Trend and structure of public debt in Nepal* (Unpublished master's thesis). Tribhuvan University, Central Department of Economics (CEDECON), Kiritipur, Kathmandu.
- Acharya, H. (2015). Trend, structure and burden of public debt in Nepal. International Journal of Economic Sciences. 4 (2), 41-57
- Barman, K. (1986). *Public debt management in India*. Department of Economics, Banaras Hindu University, Varanasi: Uppal Publishing House press.
- Bhandari, R.M. (2014). *Public debt in Nepal: An analysis of its trend and structure* (Unpublished master's thesis). Tribhuvan University, Central Department of Economics (CEDECON), Kirtipur, Kathmandu.
- Bhandari, R.S. (2014). *Public debt in Nepal: An analysis of its trend and structure* (Unpublished master's thesis). University, Central Department of Economics (CEDECON), Kiritipur, Kathmandu.
- Bista, N. B. (2015). Government domestic and private investment in Nepal. *International Journal of Economic Sciences*, 2 (2), 62-73.
- CEID (2012). Report on Study of Overall Situation of Public Debt in Nepal. Center for Innovation & Development (CEID), Lalitpur, Nepal.
- Chelliah, R.J., (2004). Fiscal policy in underdeveloped countries, New Delhi: McGraw Hill Book Co.
- Ghimire, U. (2008). *Trends and structure of public debt in Nepal* (Unpublished master's thesis). Tribhuvan University, Central Department of Economics(CEDECON), Kirtipur, Kathmandu.

- GoN/MoF (2000-2016). *Economic Surveys* (F/Y 2000/01- 2015/16). Kathmandu: Ministry of Finance (MoF)/ Government of Nepal (GoN).
- Harris, S.E. (1974). *The national debt and the new economic*. New York: Mc Graw-Hill Book Co.
- Jalan, B. (ed.). (1996). *The Indian economy problems and prospects*. New Delhi: Penguin Books.
- Joshi, M.R. (1982). *Structure of public debt in Nepal* (Unpublished master's thesis). Tribhuvan University, Central Department of Economics (CEDECON), Kiritipur, Kathmandu.
- Koirala, L.B. (2001). Effective public debt management in Nepalese economy (Unpublished master's thesis). Tribhuvan University, Central Department of Economics (CEDECON), Kiritipur, Kathmandu.
- Poudel, H. (2005). A study on structure and burden of public debt tin Nepal (Unpublished master's thesis). Kathmandu: Central Department of Economics (CEDECON), Tribhuvan University.
- Sharma, G. (2002). The growing fiscal imbalance in Nepal: are really falling into debt trap. Kathmandu: NEFAS, Nepal.
- Singh, S.K. (1991). *Public finance theory and practice*. New Delhi: S. Chand Company.
- Singh, S.K. (2004). *Public finance in theory and practice*. New Delhi: S. Chand and Company Ltd.
- Smith, A. (1776). Wealth of Nations. London, Cadell Publicer.
- Thapa, K. (2005). *Financial institutions and markets*. Kathmandu: Asmita Books Publishers and Distributors.