

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 General Background**

In the field of economics, public debt is one of the modern inventions, which is assumed as an important fiscal instrument. Public debts are based upon the credit of the government unit concerned. These units have promised to pay certain sum of money on specified dates in the future. It carries with the obligation on the part of the government to pay the money back to the persons whom it has been obtained. The government of a country collects its income from two sources namely, public revenue and public debt. The government at present has performed a lot of works. The government functions are increasing gradually in all types of economies whether developed or developing.

With the development of the concept of welfare states, responsibilities of government have been increasing drastically. The social welfare functions are increasing gradually through international pressure, too. Government itself involves in various economic activities. The expenditure on security is also increasing gradually. In present situation, the expenditure of government is increasing very rapidly as compare to national income. It is not possible to meet the increasing expenditure of the government only through revenue collection. Public debt carries with it's the obligation to back to persons, institutions, or countries from whom it has been obtained but there is not any repayment obligation in government revenue. According to P.A. Samuelson, accumulated amount what the government has borrowed to finance past deficit is called public debt (Samuelson, 1964).

Public debt is a legal obligation of the part of a government to make interest or amortization payments to holders of designated claims in accordance with a defined temporal schedule (Palgrave Dictionary). Public debt is defined as a kind of tax through which public enjoy the advantage of public expenditure. After the Second World War, public debt seemed a 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 the purpose of unifying the kingdom of Nepal. Even Chandra Shamsher is reported to have borrowed money from PashupatiNath Temple to resettle the emancipated slaves around A.D. 1925(Sharma, 1998).

Public debt was not heard of prior to the 18<sup>th</sup> century. At that time King and emperors used to take loans as a personal credibility. Hence, in the beginning people used to look upon public debt with ignorance, fear and anger. Later when the years passed by, the concept and needs of public debt arose simultaneously with the need of community development. The classical economists were generally against borrowing and they favored the minimum role of the government they were in the favor of the productive type of borrowing. But, after the great depression of 1930s, the government intervention in the economy increased due to the increase in public expense which promotes the public debt. Thus, the intervention of the government in the economy becomes an important tool. Prof. J.M. Keynes is in favor of government regulated economy that pushes government deficit. To meet the deficit budget government needs to undertake the public debt which needs not to be necessarily unproductive, inflationary and burdensome.

Public debt is one of the important sources of generating income of the government of developing countries like Nepal. It is one of the useful resources for economic development of underdeveloped countries. It helps to achieve targeted economic growth and also helps to narrow down the gap between expenditure and revenue, saving and investment required for a

targeted growth rate. Especially in developing countries like Nepal, institutional backwardness makes the functioning of economic development a complicated business. In order to remove such obstacles in the economy, public debt can be used as an inevitable tool. Thus, public debt is the most important sources of income for the economic development of Nepal.

The role of public debt has increased significantly after the planned economic development. The process of economic development in Nepal was started with the implementation of first five years Plan in 1956. Since then the volume of public expenditure has been increasing because of growing demand for fund. Nepal remained almost a debt free country till 1961/62. The accumulation of debt begins since 1963. Then Nepal has been receiving public debt from both internal as well as external sources. Internal source includes borrowing from individual and from banking sector. External debt is receiving from both bilateral and multilateral sources. The trend of borrowing external debt is very high in Nepal as compared to internal debt. Thus, particularly after 1970 the budgetary deficit has also been increasing. So, Nepal is facing a serious problem of financial resource gap on one hand and increasing population growth and inflation on another. But no doubt, if the trend of foreign debt goes on increasing like this recently, definitely, one day Nepal will be in the worse situation of debt- trap.

Therefore, public debt has positive as well as negative impact upon the economic development of the country. On one hand it has been major part of development budget and helpful for mobilization of additional financial resource and on the other hand, the country is falling into debt- trap in the form of interest and principle payment. Thus, proper utilization of public debt is very important for developing country like Nepal.

## **1.2 Statement of the Problem**

Developing countries like Nepal are moving around the vicious circle of poverty. Nepal is facing problems of financing ever-increasing resource gap because government expenditure is increasing rapidly but government revenue

is not increasing in the same pace. The government needs revenue to maintain the administration, law and order, protection against foreign aggression and for overall economic development. To cope with this taxation alone is not possible to raise sufficient funds for the development of UDCs due to low per capita income. Even tax is most important source for finance but it is impossible to raise adequate funds in this present scenario, whereas people's needs are increasing day by day. Consequently, Nepal being an underdeveloped country is facing the problem of acute financial resource gap on the one hand and increasing inflation on the other hand. Nepal has natural resources such as mineral, water, forest, land etc. But these resources cannot be properly used due to the lack of financial resources. Effective management and proper utilization of available resources is a challenging proposition. The government may borrow because current revenue may not be enough to meet its expenditure for the mobilization of these resources. The gap between government expenditure and revenue is in increasing trend. Due to this, the proportion of budget deficit is rapidly increasing in every fiscal year. In order to fulfill this resource gap public debt would be a suitable measure. So, efforts should be made on appropriate use of public borrowing.

Nepal is facing the real problem of resource gap. It needs huge level of investment to fill the resource gap. It is possible when government borrows from internal and external sources. External borrowing has been increasing more rapidly in each and every year than internal borrowing. In Nepal, the increasing trend of external borrowing is more than internal borrowing. Developing countries like Nepal use external borrowing as a mechanism to address the gap between the government expenditure and revenue and export-import gap.

Nepal has become a debt dependent country. The external debt is increasing more rapidly which has become a major source of financing development expenditure. More than 80 percent of the budget deficit was financed through external borrowing in most of the fiscal year covering 1990/91 to 20010/11.

This indicates Nepal's dependency on foreign aid. There is large share of external debt in total public debt. Therefore, Nepal is heavily indebted from external debt which has become a serious problem in the economy (Ghimire, 2008).

Thus, Nepal is heavily dependent into debt which is a challenging factor for the Nepalese economy. Gap between expenditure and revenue collection needs to be minimized for the fiscal balance. In this scenario, it is necessary to study about the Role of public debt in economic development in Nepal. In this process of the study, we are trying to find out the answers of the following problems:

1. What is the trend and pattern of public debt in Nepalese economy?
2. What are the problems of public debt?
3. Is public debt inevitable source of resource mobilization for economic development?
4. What is the relationship between public debt and gross domestic product in Nepal?

### **1.3 Objective of the Study**

The main objectives of the study are to investigate and analyze the trend and pattern of public debt in Nepal with following specific objectives.

- ) To analyze the trend and pattern of public debt in Nepal.
- ) To study resource gap and the status of public debt in macro economic framework.
- ) To generate viable recommendation on debt-trap and optimal utilization of public debt.
- ) To reflect the problems of debt and debt servicing.
- ) To examine the empirical relationship between External and Internal Debt with GDP on economic development of Nepal.

#### **1.4 Significance of the Study**

At present economic planning is taken as the main tool of economic development. In economic planning various objectives are made. Due to low level of taxable capacity of the people, public debt is essential to meet the objectives of economic development in Nepal. Hence debt has become a reliable and common instrument for resource mobilization and hence to break the vicious circle of poverty in underdeveloped countries like Nepal.

Though Nepal is rich in natural resources, she is still poor and underdeveloped. Nepalese people are living under the vicious circle of poverty. In modern era, planning is taken as the main instrument for economic development. During the planning for development, various objectives are made. To meet the objectives, public debt is necessary due to low level of tax payable capacity of the people, mostly in developing countries. Needs are increasing and resources are limited, in such situation public debt is common and reliable sources for resource mobilization. Similarly, to break the vicious circle of poverty and to improve social condition of the people, there is greater need of public debt or government borrowing. So government borrowing has been necessary for developing countries like Nepal.

Due to the concept of globalization and liberalization the developmental requirements are increasing. Now, the government is much more responsible due to the concept of federal state. For the proper implementation, economic planning is the necessary component for the rapid development which emphasizes the objectives. Government borrowing itself is not the medicine if it is not properly utilized. So government borrowing is being necessary evil to improve the condition of developing country like Nepal.

This study is efficient for those who want to know about the government borrowing in Nepal because it is totally focused on actual scenario of public debt in Nepal, 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 common of the study. It provides the clear idea about several indicators relating to the public debt which is really burden or prosperity for Nepalese Economy.

### **1.5 Limitation of the Study**

This study has been based on the following limitations:

- Due to the time and budget constraints this study covers a period from 1990/91 to 2010/11.
- This study is totally based on secondary data and information.
- This study has not attempted to examine the effect of public borrowing on macro economic variables such as money supply, price level, employment, etc except GDP.

### **1.6 Organization of the Study**

This study is divided into six different chapters. Chapter one is concerned on the introductory part of the study. It includes the general background, statement of problems, object of study, significant of study and limitation of study. Chapter Two is concerned on the Review of Literature. In this chapter previous studies and findings have been analyzed with theoretical studies. Chapter Three describes about Research methodology. Chapter Four is related with the Role and Trend of public debt in Nepal. Chapter Five describes problems and prospects of public debt in underdeveloped countries and Chapter Six shows summary, findings, conclusion and recommendations.

## **CHAPTER TWO**

### **REVIEW OF LITERATURE**

In this chapter attempts have been made to review the related literatures which have been divided in to two parts-theoretical review and research review. In the theoretical review attempt have been made to review the theoretical aspects of the study, especially classical,keynesian,post keynesian,and recent thinking on government borrowing and in the research review a vigorous attempt has been made to review the relevant research studies being done so far.

#### **2.1 Conceptual Review**

Public borrowing was in invention and was not heard prior to the eighteen century. In the past, the way of living was very simple and the borrowing was not very significant. The government budgets were very small and the government also followed the policy of non-intervention in economic system. But in the modern times, especially after the world depression of 1929-30 the public authorities started to take interest in the economic development of their respective countries. Thus, public borrowing has become sine-que-non for the economic development of a nation .Government activity is expanding vastly and without public borrowing it is not possible to work on such heavy projects .In this way it has become part and parcel of the instrument of fiscal policy for the economic development of under-developed as well as for the developed countries.

Generally, public borrowing refers to loan raised by a government within the country or outside the country. Every government, like individuals has to borrow when it is not a source of revenue like taxes.

#### **2.2 Concept of Deficit Budget**

The situation of higher expenditure then revenue in government finance is known as fiscal deficit. Though there are various sources of government to



finance its expenditure, the stable one is taxation. But due to the various limitations of taxation and the requirement of large amount of development expenditure in UDCs like Nepal, the situation of fiscal deficit is the revenue gap between total expenditure and total revenue plus foreign grants in context of Nepal.

### **2.3 Classical View on Budget and Public debt**

The classical economists were in favor of balanced budget and they were of the opinion that public borrowing had no significant role in the economy. Therefore public borrowing should either be avoided or kept in a minimum possible level. If government found no alternative to finance deficit other than internal borrowing “ordinary expenses should be met out of current taxes government expenditure devoted to producing capital equipment must be raised by loan”(Pigou 1949). Classical economist assumed that the economy exists with full employment and the excess expenditure will be inflationary, that is will be destabilizing. They also thought that the borrowing form public compels the government taxing more and consequently the economic system will be disturbed.

### **2.4 Keynes View on Public Budget and Debt**

However, after the great depression of 1930 Keynesian revolution came in to existence as a remedy of the depression Keynes correlated public borrowing with deficit financing and argued that government has to borrow for all purposes so that effective demand in the economy will increase. Thus borrowing for consumption is also desirable for Keynes because borrowing for consumption expenditure will include investment to rise (Barman, 1986).

### **2.5 Modern View on Public Debt**

The recent economic principle has also considered deficit budget as an appropriate budgetary policy for underdeveloped countries and public

borrowing has become an integral part of resource mobilization in UDCs like Nepal. It is used to meet the development expenditure as well as raising effective demand in the economy. Most of the development countries formulate deficit budget for which public borrowing is an effective fiscal instrument. It is also used as an instrument to implement monetary policy to some extent in combating inflation that exists in the process of growth.

## **2.6 Sources of Borrowing**

The sources of government borrowing classified into two types: internal and external. Internally, the government can borrow from individuals, commercial banks, financial institutions, charitable trusts and the central bank in a country. Externally the government can borrow from individual banks, international financial institutions, foreign governments and World Bank. Here, it is necessary to mention that the true effects of public borrowings will depend upon the sources of borrowed funds to a greater extent.

### **a. Internal Sources of Government Borrowing.**

Internally, the government may borrow from the banking and non banking sources. The government uses a number of debt Instruments to raises funds domestically, which are described briefly as below.

#### **Instruments Used for Internal Borrowing.**

) **Treasury Bills:** The treasury bills are issued on the auction as specified in the issue calendar. The Treasury bill is most of the time purchased by commercial banks as a competitive bidder and others rarely as a non competitive bidder. Treasury bill is issued on multiple price formats or pays bid format. Thus the treasury bills auction could be divided into competitive and non competitive categories allocating at least 15 percent of total offered amount for the non-competitive bidders.

While issuing treasury bills the notice of auction would be published in the national daily news paper mentioning the necessary terms like series number offered amount, taxable non taxable and maturity period, earnest money, issue date, bidding time procedure and other conditions. This information would also be disseminated via website of NRB.

Treasury bills are issued as promissory notes so that the buyer of TBS could purchase and sale these bills by endorsement as well as through the commercial banks. The face value will be repaid by the NRB (Nepal Rastra Bank) at the maturity. The government of Nepal has issued 28 days, 91 days, 182 days and 364 days bills under this category.

) **Bond:** Long-term securities are issued as per the issue calendar. The government of Nepal issues long-term securities such as development bond, national saving certificates and citizen saving certificates as stock or promissory note. For issuance of these bonds, the notice would be published in the daily newspaper by mentioning the special feature like type of bonds, interest rate, maturity period, time limit, procedure and required conditions. This information would also be availed from central bank website ([www.nrb.org.np](http://www.nrb.org.np)). The types of bonds issued are described below.

) **Development Bond:** The development bonds have been issued in face value at pre-determined interest rate. A notice would be published in the newspaper by mentioning the special features, like type of bonds, amount interest rate and issue date, taxable/non taxable condition, application time limit and others. This information would also be released in the central bank website. These instruments generally issued for 3 years or more than 3 years maturity period for financing the development projects having long gestation period.

) **Special Bond:** These are conditional promise to pay a specific sum of loan on specific dates. These instruments are specially issued in the case of short position in the government case flow. These days the special bonds are issued for the duty drawback settlement.

) **National saving certificate and citizen saving certificates:** Generally, these are non marketable and tax exempted debt instruments usually issued for the public (Household sector). However national saving certificate and citizen saving certificate in Nepal are makeable as well as taxable securities as the moment. These certificates are sold in face value with pre-determined interest rate for this issuance of the certificates the notice would be published in the newspaper focusing the necessary terms and conditions.

### **b. External Sources of Government Borrowing**

The external sources of government borrowing include foreign government(s), international financial institutions, foreigners etc. The external sources are broadly classified into bilateral and multilateral sources. Government may borrow from others countries, apart from borrowing from individuals and financial institutions within the country. The borrowing can be used to finance war expenditure or to buy defense equipment or to pay for the development projects or to pay off adverse balance of payments. In the past, floating of loan for any specific like railway or dam construction was taken up by individual, banking and other financial institutions. But in recent years, two important external sources of government borrowing are prominent as:

i) International financial institutions like I.M.F. and I.B.R.D. The I.D.A. and I.F.C.: These institutions give loans to member countries for the short –term period covering temporary balance of payments difficulties and for long-term for development projects.

ii) Government assistance from friendly nations, which is mainly used for development projects. In modern times, developing countries like Nepal have received massive assistance from the Nepal Aid group.

## **2.7 Review of Related studies**

Although different research works are carried out by different scholars within the various geographical region. These studies and issues are reviewed in this section.

### **2.7.1 Theoretical Concept/International Context**

The fund or capital taken in the form of loan by the state from various sources is called public debt. Public debt has been given great importance in view of increasing magnitude of budgetary deficits. When current expenditure exceeds current revenue it is said to be deficit budgeting. In recent years there has been an abnormal expansion in the functions of the government and this has increased its revenue and capital expenditures. Modern wars and growth of defense expenditure have also led to increase in public expenditure. In fact, increase in public expenditure has been responsible for vast increase in public debt everywhere.

Public debt has been the single most important source of funds to finance the development plans of the Government of Nepal. Raising sufficient funds in the form of public debt is, therefore, important for sustained economic growth and to end prolonged poverty. Since a failure to meet debt obligations could lead to a serious economic crisis, managing public debt within a sustainable level is an important policy issue in itself. Higher debt levels could contribute to higher growth, but it could also increase the probability of default.

Public debt must have to be productively used. If not, many problems can be created and it has to be destructive and devastative one for the future generation on monetary impact on the form of tax. The effect will not affect the tax payer alone but it also can be seen in form of decreasing productivity, decreasing demand for goods and commodities due to increasing amount of taxation. Then the economy may come into the phase of recession.

In Nepalese context, government started to use deficit financing from 1964. The deficit was fulfilled by printing money, issuing HMG securities, borrowing from internal and external sources etc. Many development projects were also initiated with the assistance of foreign countries and agencies. On the other hand, the internal causes of increasing government expenditure and inflation compelled government to accept and take debt.

Domar defined in his article Public debt as the ratio of the total debt to the national income. He lays down the condition under which the burden would increase or decrease over time. He proposed a relation as following:

Let,

D = amount of debt outstanding at a beginning of a year.

T = amount of taxes necessary to cover the interest change on debt.

i = ratio of interest paid on debt.

So,

$$T = Di \dots\dots\dots (i)$$

Let, t = fraction of income (Y) taken through tax to pay interest.

Therefore,

$$t = T/Y = iD/Y \dots\dots\dots (ii)$$

From the equation (ii) it follows that tax rate is necessary to pay interest on debt depends on the size of debt multiplied by the rate of the interest to income. The tax rate may be related to growth of income and the budget. Therefore the relevant equation is:

$$t = \frac{1}{(1/i)(G/b)} = \frac{ib}{G}$$

Where,

G = ratio of growth of income.

b = ratio of deficit to income.

This equation shows the burden of debt would increase or decrease. When either ratio of deficit to income or rate of interest paid on debt increases then

the burden of debt will also be increased or the burden of debt (t) and ratio of deficit to income (b) and rate of interest paid on debt has positive relationship. Likewise, the burden of debt (t) and rate of growth of income (G) has negative relationship (Domar, 1944).

Musgrave has defined, Self-liquidating projects may be defined narrowly as investment in public enterprises that provide a fee or sales income sufficient to service the debt incurred in their financing, or they may be defined broadly as expenditure projects that increase future income and the tax base. Such projects permit servicing (interest and amortization) of the debt incurred in their financing without requiring an increase in the future level of tax rates (Musgrave, 1959; 569).

Newman, defined in his article. The classical economists have viewed the economy as always being or tending to be fully employed. Hence their thinking on public debt stressed real rather than monetary aspects. In an economy in which all resources are in use government cannot acquire resources by borrowing save at the expense of the private sector. Borrowing must divert scarce means of production from the private sector to the public sector of the economy (Newman, 1968; 174).

Taylor defined ,Government debt arises out of borrowing by the treasury from banks, business organizations, and individuals. The debt is in the form of promises by the treasury to pay to the holders of these promises a principal sum and in most instances interest on that principal. Borrowing by the treasury takes place when current revenue receipts are inadequate to maintain a treasury cash balance large enough to meet current cost payments and to retire maturing debt. Borrowing is resorted to in order to provide funds for financing a current budget deficit. Such current deficit borrowing results in a net addition to public debt. In recent fiscal years, however, a major part of federal government borrowing has been to refund already existing debt as it matures (Taylor, 1974; 178).

Classical Theory is criticized after the great depression of 1930s and new wave of thinking took place in the writing of J.M Keynes. It was Keynesian economics that effected a truly significant revision in the theory of public debt. “The General Theory of Employment, Interest, and Money” which Keynes published in 1936, attacked the classical idea that an enterprise economy is self-equilibrating at full employment level. Instead, he argued, such an economy may tend towards an under employment equilibrium, in which case there are resources in private sector that may be unemployed for relatively long periods of time in the absence of corrective or compensating action by government. In a situation when resources are unemployed on large scale, government employment of these resources does not necessarily deprive the private sector of anything. On the other hand, increased government spending by using idle men and materials is likely to raise the level of aggregate output and income. Hence public borrowing need not necessarily be unproductive, inflationary and burdensome.

For Keynesian economists, if public debts are internally held, there is nothing to worry about their size. Such a debt involves merely a series of transfer payments and they cancel out for the economy as a whole, hence the only concern was on high level of income and employment. Keynesian view is that deficit budget would be a powerful tool during the time period of stagnation or depression.

In a world in which Keynesianism abounds, one might reasonably expect that just balancing of the government’s budget would be regarded as an outmoded policy goal. A great many other pre-Keynesian fiscal notions have gone hackneyed. One seldom hears those days that a rupee of government expenditure causes a corresponding reduction of a rupee of private outlay, or that government expenditures cannot raise the level of national income, or that we can never achieve fuller employment by government spending. But amidst the wide acceptance of the goals and tools of Keynesianism, there is



remarkable persistence in the notion that government budgets ought to be balanced even balanced annually.

During the World War and post world war period, the size of public debt and debt serving increased enormously. This has made the economists to make the revision on the aspect of public debt. The post Keynesian development concept was that it emphasized the transfer and management aspect as well as interrelationship between public debt and money supply. Post Keynesian economists accepted the large part of modification of the classical debt theory as brought about by the Keynesians. They propounded an idea in which government does not prevent the private economy of resources at the time of widespread unemployment in the economy. They also accepted that in the period of inflation, borrowing must be inflationary. They believed that more public poses more problems in the economy which creates problem in debt management.

Goode, defined. Borrowed money when used to finance public investment causes no such reduction; all that will happen is the change in the consumption of capital formation. Borrowed money when used to finance public investment because no such reduction all that will happen is the change in the consumption of capital formation, the inference is that failure to restrict borrowing to the finance of investments will retard economic growth. A weakness of the government is that not all outlays classified as government consumption to promote growth (Goode, 1984; 198).

The Post-Keynesian economists did not reject the entirely classical notion regarding to public debt rather put it in a better prospective.

) 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 as well as essential.

- ) Besides, it is not accepted now because borrowing in the period of full employment generally becomes inflationary than taxation.
- ) Internally holding of large public debt poses many problems for the economy. It complicates the monetary policy and creates difficulties of management and so on
- ) In resorting to borrowing, government should be guided by macro economic considerations.

Barman has defined. Now a day's public debt is applied, especially in under developed countries, as a fiscal instrument to raise the effective demand, which ultimately leads to accelerate the pace of economic development. It also acts as an effective instrument of inflation generated in the process of growth and ensures growth with stability. Besides it also acts as a balancing wheel that controls the tempo of the business cycle. In period of depression when aggregate demand is not enough to accelerate the level of production and employment, compensatory fiscal policy suggest 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; 12).

Chelliah, defined in his article. The ideal situation is one in which first revenues will need subsidies, other transfer, interest payments, and the greater part of current expenditure; debt finance will be used for meeting the government's non-remunerative capital formation, a promotion of current expenditure defined to increase social capital and productive and the requirements of financial investments and second, the total of domestic borrowing will be determined in such a way that, given the rate of domestic saving, the non-government 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 current amount of seigniorage (Chelliah, 1992; 208).

Sabater, defined. A discussion paper was prepared by United Nation Conference

on Trade and Development “Multilateral debt of least developed countries” has reviewed development in multilateral debt of least developed countries since the crisis of the early 1980s. This paper has discussed on problem of multilateral debt as sustainability, liquidity and accumulation of large scale arrears. The discussion paper has also evaluated recent schemes to provide debt relief and suggested possible measures to strengthen and improve existing schemes as well as present other innovative obtains. The analysis focused mainly on the least developed countries (LDCs). Thirty seven countries registered multilateral debt arrears in 1993; national Monetary Fund has heavily indebted poor countries. There are 48 countries classified in 1995 by the United Nations as least developed countries (Sabater, 1995; 2-24).

Sundharam and Andley has defined, Public borrowing is considered very useful to remedy a depression; in fact, the strongest case for public borrowing is as a remedy for depression. During a period of depression, the level of economic activity is low, resulting in low production and unemployment. The depression and unemployment are generally due to deficiency of demand for goods and services. Many economists like Keynes have advocated increased public expenditure financed through borrowing and not through taxation, for while taxation will reduce incomes and demand still further, borrowing will have no such effect. Besides, loans enable the government to make use of idle and unutilized funds of the public. Thus, there is a strong justification in favor of public borrowing to cure unemployment (Sundharam and Andley, 1998; 331).

The level of government borrowing is a function of the ability and willingness of persons and business to lend and the government’s power and invention to tax. Maximum level of debt can be expressed in terms of the following equation.

$$D = \frac{Y_t Z O}{r}$$

Where,

$D$  = Maximum sustainable national debt

$O$  = Constant expenditure for ordinary government operation

$Y_{t=}$  Maximum ratio of tax receipts to national income

$r$  = the contractual interest rate of government debt.

Ratna Sahay in *IMF* working paper entitled “Stabilization, Debt, and Fiscal Policy in Caribbean” has concluded that the majority of Caribbean countries are characterized by high public debt, and reducing public debt should be a key macroeconomic goal going forward. Although there are differences in performance across countries, a common feature of all countries in the last five years has been the deterioration in fiscal positions. Today 14 out of the 15 Caribbean countries are among the 30 most indebted emerging market countries in the world. Given the large vulnerabilities emanating from exogenous shocks in the region and high debt, the probability of financial crises has risen. There are five key elements of efforts to successfully reduce public debt to more sustainable levels and help countries achieve their growth potential. These are:

- ) Fiscal consolidation
- ) Prudent debt management strategies
- ) Asset sales/ privatization
- ) Reducing vulnerabilities to exogenous shocks, and
- ) Growth-enhancing structural reforms

Given the exceptionally high levels of debt in many countries a combination of these elements is needed (Sahay, 2005; 15).

ADB in its ERD working paper entitled “Empirical Assessment of Sustainability and Feasibility of Government Debt: The Philippines case” has assessed empirically the sustainability and feasibility of the government debt

situation in the Philippines. The assessment is mainly carried out on the debt-to-GDP ratio using both its historical data and forecasts generated by a macro econometric model of the Philippine economy. This shows that the government debt situation is not sustainable as far as the present regime is concerned. One key reason for the existing high government debt is the fact that the government still enjoys lower bond rates than the market lending rates. This result shows that the government is facing a high risk of running into a debt crisis in the event of a major adverse shock to the economy. They provide strong support to the warnings about the critical government debt situation and highlight the difficulty and the urgency of improving the government's fiscal position in the present Philippine economy (Asian Development Bank, 2005; 19).

### **2.7.2 Nepalese Context**

Various students, administrators, economists, foreigners have made theses, dissertations, studies and reports about Nepalese public debt. Some of those articles, theses and project reports related to the subjects included in this thesis are as follows:

Acharya has made the first exercise on public debt, writing a thesis that was submitted to Tribhuvan University in 1968. He has presented a case study titled "A Case Study on Public Debt in Nepal" including features, problems and pattern of public debt. He concludes that public debt is most popular in this country because of payment of debt maturity can be adjusted through the issues of fresh public debt instruments. But the fact is that the habit of purchasing bonds issued by the government should be developed among the people (Acharya, 1968).

Dahal, defined in his article. Great Britain at first helped Nepal to install the Parping Hydropower Project during the reign of Chandra Shamsheer (Shrestha, 1990). When formal assistance in Nepal came from USA in 1951 in

the grab of “Point Forum Program” since then the role of Indian aid too was diversified in that Indian aid started to support massively the infrastructure activities in different sectors. Capital aid from USA was after 1956 when Nepal entered the planning and central banking era (Sharma, 1987). Assistance from China and USSR, since the late 1950s, when Nepal has to be faced BOP problem, Nepal asked to borrow correcting the macro economic imbalances, strengthening incentives for domestic savings and investments and achieving greater efficiency in resource allocation through medium term of SAP program (Dahal,1990).

Guna Nidhi Sharma in his article analyzed that the ever increasing debt in Nepal and its servicing has really created a situation which is deriving the country towards debt trap by the 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 exceeds the maximum legal limited of borrowing (Sharma, 1998).

Pyakuryal in his article entitled “Per capita external assistance in Nepal is highest in South Asia but volume of foreign aid is inelastic in bringing positive changes in GDP” has written and he suggested about effective use, reduction in aid dependency and quality enhancement, if no inability to enhance aid utilization can drag the country in to the debt trap (Pyakuryal, 2002).

Bhandari in his thesis defined that, Public debt is widely accepted measure for financing government expenditure. His future observed that due to the high interest rate of internal debt, the debt servicing of internal debt is greater than external debt serving. The large portion of revenue is spending for debt serving. It has found that the debt servicing capacity is lower than the total debt obligation. In his view the average growth rate of debt service obligation is

higher than the growth rate of GDP, revenue and export earnings. So, the growth rate of debt becomes faster and higher than the redemption of debt (Bhandari, 2006).

Thapa in his M.A. dissertation concluded that government should maintain fiscal balance by applying strong fiscal monitoring policy, which might contribute to control growing unproductive and useless expenses in one side and increased revenue on other. To maintain balance the government expenditure has to be controlled and allocated the basis of national priority and to increase government revenue through transparent tax policy and effective tax administration. It is better to reduce the increasing trend of public debt. Revenue collection should be increased substantially in order to attain self sufficiency in the long run. To increase the government revenue must effective tax policy, effective tax administration, control corruption, re-estimation of tax, rationalization of tax structure and expansion on tax base (Thapa, 2007).

Ghimire in her M.A. dissertation concluded that, The average annual growth rate of GDP, revenue and export earnings are considerably low as compared with that of debt and its servicing obligation and most of the borrowed funds are using in unproductive sectors. 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 debt and poor servicing capacity of the government compel to think the sinking condition of the 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 (Ghimire, 2008).

Regmi in his M.A. dissertation found out that, Nepal is in critical phase of managing public finance because of inadequacy of internal resources. Fiscal or

revenue deficit is widening every year. In order to finance the deficit, the government is borrowing internal and domestic debt. The portion of external debt is too higher as compared to domestic loan. In the fiscal year 1986/87, the domestic debt accounted for 37.2 percent of the total debt, while its share was 28.6 percent in 2005/06. Likewise, the share of external loans increased to 71.4 in 2005/06, up from 62.8 percent in 1986/87, reflecting growing dependency of Nepal on foreign loan (Regmi, 2008).



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Design**

The design of this study is based on historical, analytical and descriptive approaches. Research design is the plan, structure and the strategy of investigation conceived so as to obtain answers to research questions. This research work is designed to analyze the impact of foreign debt on the economic development of Nepal. For this purpose we have developed production type model and the variables used in the model have been explained in this methodology. The model has been estimated by using Ordinary Least Square Method. To identify the significance of result, different statistical methods of different tests like t-test, F-test,  $R^2$ -test, etc. have been used.

#### **3.2 Sources of Data**

This analysis of the study attempts to get various empirical results using only secondary data. The required data are collected from various sources like Economic Survey 2009/10;2010/11 Ministry of Finance, Quarterly Economic Bulletin published by Nepal Rastra Bank and other bulletins and publications like budget speech, Human Development Report, World Development Report Various publications of National Planning Commission are also used for other important information.

#### **3.3 Data processing**

The data collected from above motioned sources were tabulated to meet the requirements of the study. While shaping the data in the tabulated from, proper attention is given not to let the chances of error.

Simple calculation like ratio, percentage etc. is made with the help of ordinary calculator. SPSS (Statistical program for Social Science), a computer application program and Excel are used to calculate and analyze the regression

equation. It is also used for other mathematical calculation like annual growth rate,  $R^2$ , Adj.  $R^2$ , F-test, t-test, etc.

### 3.4 The Description of the Variables

- ) **Public Debt:** Total public debt includes an external obligation of a public debtors and the nation government.
- ) **Gross Domestic Product (GDP):** The total final output of goods and services produced by the country's economy, within the country's territory, by residents and non-residents, regardless of its allocation between domestic and foreign claims.
- ) **Debt Servicing:** The sum of interest and principal payment and repayment of interest on external public and publicity guaranteed debt.
- ) **Debt Service Ratio:** The ratio of interest and principal payments due in a year to export receipts for that year.
- ) **External Debt (ED):** It is 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 floated with in the country.
- ) **Export of Goods and Services:** It is the amount of goods and services sold to another country.
- ) **Debt -Trap:** The situation when a new fresh loan is used to repayment of interest.
- ) **Burden of Debt:** Burden of debt is the sacrifice of the community through a rise in taxation at the time of repayment and for paying for the annual interests on the government.

) **Import of Goods and Services:** It is the purchases of goods and services from another country.

) **Inflation:** Inflation is defined as the gradual and persistent rise in the general price level. The consumer price index (CPI) published and compiled by NRB has been taken as the measurement of inflation. Symbolically,  $\zeta \text{ InP}_t = \text{Inflation} (\text{InP}_t - \text{InP}_{t-1})$

### 3.5 Regression Equation

The theoretical statement of this regression model is that Gross Domestic Product (GDP) is depends upon the Internal Debt and External Debt. This shows the relationship between GDP and internal debt, external debt as well as total debt. Mathematically, this can be written as:

1.  $Y = a_0 + a_1 X_1$

2.  $Y = a_0 + a_1 X_2$

3.  $Y = a_0 + a_1 X$

Where,

$Y$  = Gross Domestic Product (GDP)

$X$  = Total Debt (TD)

$X_1$  = Internal Debt (ID)

$X_2$  = External Debt (ED)

$a_0$  and  $a_1$  are the parameters.

### 3.6. Test of Significance of the Parameter Estimates

It is applied for judging the statistical reliability of the estimates of the regression coefficients. The following tests have been performed to test the hypothesis in the study:

#### 3.6.1 t-test

This test was performed in order to identify the statistical significance of an observed sample regression coefficient. The formula for calculating the value is:

$$t = \frac{\hat{a}_i}{SE(\hat{a}_i)}$$

Where,

$\hat{a}_i$  = Estimated value of  $a_i$

$SE(\hat{a}_i)$  = Standard error of  $a_i$

$$SE(\hat{a}_i) = \sqrt{\text{Var}_{a_i}}$$

The calculated t –value have been compared with tabulated t-values at a certain level of significance, for a given degree of freedom. If the calculated t-value exceeds the table value, It is inferred that estimated coefficient is significantly different from zero.

#### 3.6.2 F-test

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

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

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.

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION

#### 4.0 Introduction

Public debt is interrelated with the basic government fiscal flows of taxation and expenditure. If the volume of government expenditure exceeds the volume of tax revenue and other non-tax revenue then a deficit budget exists. Such a deficit budget provides the fundamental pre-condition for debt creation heaving once been created debt requires interest's payments to maintain the debt and refinancing operations of the debt is to beyond the maturities of existing securities.

The phenomenon of public debt was originated in Great Britain in 17<sup>th</sup> century where city merchants provided grants and loans to the government. It 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 precondition for debt creation. Such created debt needs interest payment to maintain the debt and refinancing operations of the debt.

Some historical events suggest that public debt is not altogether a new practice in Nepal. In the past, kings/prime ministers used to take resource of public debt. King Prithivi Narayan Shah had borrowed from the public for financing the war in 1968 A.D. The Rana Prime Minister Chandra Shamshere had also borrowed money from Pashupati Nath temple to resettle the emancipated slaves 1925 A.D.

Nepal was a debt free country until 1951 A.D. With the enforcement of Public Debt Act 1960, domestic public in the forms of Treasury Bills, Development Bonds, and National Saving Certificates were issued in 1962, 1963/64 and 1984 respectively. These bonds and bills are of regular nature. Some of them are issued as deficit –financing instruments while others are issued with a view to deepen the money mark. Besides, there are many other bonds such as:

Special Bonds, Land Compensation Bonds (1964), Forest Compensation Bonds (1965), Interest Prize Bonds (1991) and other various special bonds.

In Nepal, first experience of foreign aid was that of the US government in 23 January, 1951 with an agreement of 'four-point-program'. In the first five year plan (1956/57-1960/61) of Nepal, the development expenditure was fulfilled by foreign 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 1964. For the first time FY 1963/64, the government floated securities for mobilizing internal saving to finance the country's economic development programs. The amount of external borrowing of Nepal has continued increase every year. The main sources of external borrowing of Nepal are bilateral sources i.e. developed countries, mainly America, Japan, Norway, China, India and others and Multilateral sources like IMF, WB, and ADB.(Sharma;2002)

There are mainly three reasons for raising the government borrowing.

- To recover the deficit budget,
- To tackle the emergency period of crisis,
- To sustain the economic and monetary stability.

Nepal has been borrowing heavily from external sources mainly to balance her budgetary deficit. To fulfill the objectives of the economic development, there is need of heavy investment to build up socio-economic infrastructure such as health, education, transportation, communication etc. For this, there is no other possible means for government revenue. So public debt is a must for it, it is widely accepted as a means of deficit financing measures to reduce the Bop deficit, imbalance and resource gap. Deficit financing is estimated as a gap between expected government expenditure minus expected revenue plus foreign grant. Thus,

$$\text{Deficit} = \text{Expenditure} - (\text{Revenue} + \text{Foreign Grant})$$

Expenditure is estimated for a targeted rate of growth. Savings-investment gap and slow growth of revenue as compared to growth in government expenditure cause this deficit. Saving –investment gap will prompt the government to borrow for creating socio-economic infrastructure required also for promoting investment from the private sector investment.

#### **4.1 Resource Gap in Nepalese Economy**

Resource gap in Nepalese economy has always been a common phenomenon since the starting of the systematic budgeting system in Nepal. Every individual as well as government needs fund to maintain their daily expenditure but importance of fund is much more 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 sources 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 rate and fees, which is unjustifiable 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. That is why the annual growth rate of total expenditure and the collected revenue are not increasing in the same pace. Thus, revenue expenditure gap is growing in every fiscal year. The table 4.1 shows the different scenarios of financial resource gap in Nepalese budgetary system.



**Table No. 4.1 Different Scenario of Resource Gap (1990/91 – 20010/11) (Rs. in Millions)**

FY	Government Revenue	Annual Growth rate of Govt. Revenue	Total Expenditure	Annual Growth rate of Government Expenditure	Revenue Expenditure Gap.	GDP	Revenue as % of GDP	Expenditure as % of GDP	Revenue Expenditure Gap As % of GDP
1990/91	10729.7	–	23549.8	–	12879.9	116127.0	9.2	20.3	11.1
1991/92	13502.7	26.0	26418.2	12.1	12905.5	144933.0	9.3	18.2	8.9
1992/93	15148.4	12.1	30897.7	17.0	15749.3	165350.0	9.2	18.7	9.5
1993/94	19580.8	29.3	33597.4	8.7	14016.6	191596.0	10.2	17.5	7.3
1994/95	24575.2	25.5	39060.0	16.3	14484.8	209976.0	11.7	18.6	6.9
1995/96	27893.1	13.5	46542.4	19.2	18649.3	239388.0	11.7	19.4	7.8
1996/97	30373.5	8.9	50723.7	9.0	20350.2	269570.0	11.3	18.8	7.5
1997/98	32937.9	8.4	56118.3	10.6	23180.4	289798.0	11.4	19.4	8.0
1998/99	37251.0	13.1	59579.0	6.2	22328.0	330018.0	11.3	18.1	6.8
1999/2000	42893.8	15.1	66272.5	11.2	23378.7	366251.0	11.7	18.1	6.4
2000/01	48893.6	14.0	79835.1	20.5	30941.5	394052.0	12.4	20.3	7.9
2001/02	50445.5	3.2	80072.2	0.3	29626.5	425454.0	11.9	18.8	7.0
2002/03	56229.8	11.5	84006.1	4.9	27776.3	444052.0	12.7	18.9	6.3
2003/04	63331.0	10.9	89442.6	6.5	27111.6	473545.0	13.2	18.9	5.7
2004/05	70122.7	12.5	102560.4	14.7	32437.7	517993.0	13.5	19.8	6.3
2005/06	72282.1	3.1	110889.2	8.1	38607.1	630300.0	11.5	17.6	6.1
2006/07	87712.1	21.3	133604.6	20.5	45892.5	696989.0	12.6	19.2	6.6
2007/08	107622.5	22.7	163000.0	22.0	55377.3	781262.0	13.7	20.8	7.0
2008/09	143474.5	33.3	201966.2	34.7	76187.5	938671.0	15.3	23.4	8.1
2009/10	179945.8	25.4	259689.1	18.2	79743.3	1096038.0	16.4	23.7	7.3
2010/11	199819.0	11.1	295363.4	13.7	95544.4	1369431.0	14.5	21.5	6.9
Average Annual Growth Rate	–	15.3	–	13.0	–		12.0	19.2	7.5

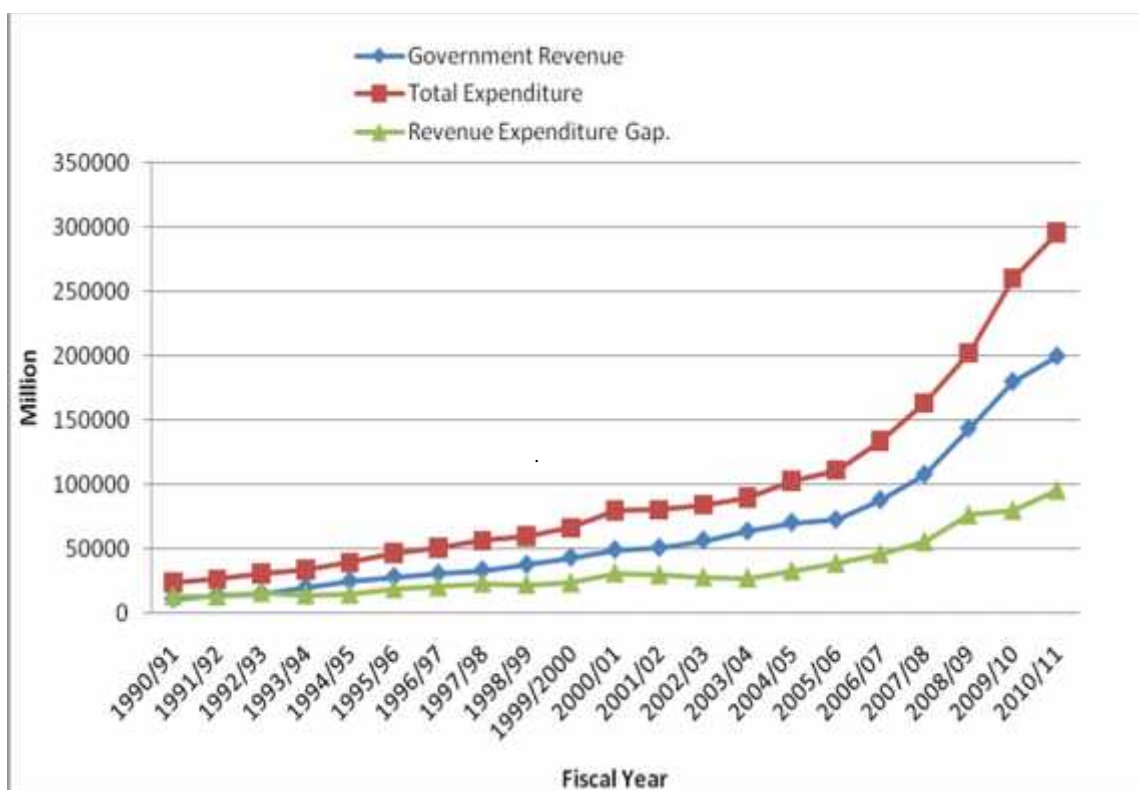
Source: Adopted and computed from Nepal government, MOF, various issues of Economic survey, FY 2009/10 and FY 2010/11 Table no.2.1, page-21.

In the above Table 4.1 second column and fourth column shows the trends in revenue and expenditure in Nepal. The column six shows the revenue expenditure gap in which we can see the increasing tendency mainly because of increasing volume of total expenditure than revenue. The amount of total expenditure was Rs. 23549.8 million in FY 1990/91 has gone up to Rs. 295363.4 million in 2010/11; whereas total revenue has increased from 10729.7million in FY 1990/91 to Rs. 199819.0 in FY 2010/11. This shows the public expenditure has dominated to government revenue. Thus, the revenue-expenditure gap is Rs. 12879.9 million in FY 1990/91. The expenditure gap is continuously increasing each fiscal year. In FY 2010/11 the gap has been Rs. 95544.4 million. This indicates that the resource gap is serious problem in Nepal.

In the FY 2010/11 the growth rate of total expenditure has been 13.0 percent per annual where as annual growth rate of total revenue has been 15.5 percent. It shows that the growth rate of revenue is greater than expenditure but annual growth rate of expenditure has been increased rapidly than annual growth rate of revenue. This indicates the horrible situation of increasing trend of resource gap in coming future.

The column ten shows the resource gap as percentage of GDP. GDP has been increasing continuously from FY1990/91 to FY 2010/11. 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 11.1 percent in FY 1990/91 to 76.9 percent in FY2010/11. Average annual growth rate of revenue expenditure gap as percentage of GDP is 7.3 percent. We can show the different scenario of Resource Gap in Nepal in the following figure.

**Figure 4.1 Different Scenario of Resource Gap in Nepal**



Source: Based on the table 4.1

Figure 4.1 shows different scenario of resource gap. It shows that both revenue and expenditure are increasing, but the increasing rate expenditure is higher than revenue. So, the gap between revenue and expenditure is very high in every fiscal year.

#### **4.2 Growth Trend in Government Debt**

After the restoration of multiparty system, the scope of government has been increasing and investing more, so the government expenditure is increasing. The reliance on taxation is not possible in view of the large amount of financial resources required for government expenditure due to the administration is not fair, and transparent. So, Nepal is facing large and growing financial resource gap in the government budgetary. In this context, the government borrowing both external and internal needs for supplements this resource gap. The government has to borrow large amount of loans to meet the fiscal deficit, which is shown on Table 4.2.

**Table 4.2 Trends in Government Debt and Annual Growth Rate**

(Rs. in Millions)

FY	Internal Debt (ID)	External Debt (ED)	Total Debt (TD)	% Share of ID in TD	% Share of ED in TD	GDP	Internal Debt as % of GDP	External Debt as % of GDP	Total Debt as % of GDP
1990/91	4552.7	6256.7	10809.4	42.1	57.9	116127.0	3.90	3.48	9.31
1991/92	2078.8	6816.9	8895.7	23.4	76.6	144933.0	1.43	4.70	6.14
1992/93	1620.0	6920.9	8540.9	19.0	81.0	165350.0	0.98	4.19	5.17
1993/94	1820.8	9163.6	10984.4	16.6	83.4	191596.0	0.95	4.78	5.73
1994/95	1900.0	7312.3	9212.3	20.6	79.4	209976.0	0.90	3.48	4.39
1995/96	2200.0	9463.9	11663.9	18.9	81.1	239388.0	0.92	3.95	4.87
1996/97	3000.0	9043.6	12043.6	24.9	75.1	269570.0	1.11	3.35	4.47
1997/98	3400.0	11054.6	14454.4	23.5	76.5	289798.0	1.17	3.81	4.99
1998/99	4710.0	11652.4	16562.4	28.4	71.6	330018.0	1.43	3.59	5.02
1999/2000	5500.0	11812.2	17312.2	31.8	68.2	366251.0	1.50	3.23	4.73
2000/01	7000.0	12044.0	19044.0	36.8	63.2	394052.0	1.78	3.06	4.83
2001/02	8000.0	7698.7	15698.7	51.0	49.0	425454.0	1.88	1.81	3.69
2002/03	8880.0	4546.4	13426.4	66.1	33.9	444052.0	2.00	1.02	3.02
2003/04	5607.8	7629.0	13236.0	42.4	57.6	473545.0	1.18	1.61	2.80
2004/05	8938.1	9266.0	18204.1	49.1	50.9	517993.0	1.73	1.79	3.51
2005/06	11834.2	8214.4	20048.6	59.0	41.0	630300.0	1.88	1.30	3.18
2006/07	17892.3	10053.5	27945.8	64.0	36.0	696989.0	2.57	1.44	4.01
2007/08	20500.0	11325.5	31825.5	64.4	35.6	781262.0	2.62	1.45	4.07
2008/09	18417.1	9968.9	28386.0	64.8	35.1	938671.0	1.96	1.06	3.02
2009/10	29914.0	11223.4	41137.4	72.7	27.3	1096038.0	2.72	1.02	3.75
2010/11	42515.8	12075.6	54591.6	77.8	22.1	1369431.0	3.1	1.1	3.9
Average Annual Growth	—	—	—	40.9	59.0	—	1.7	2.1	4.5

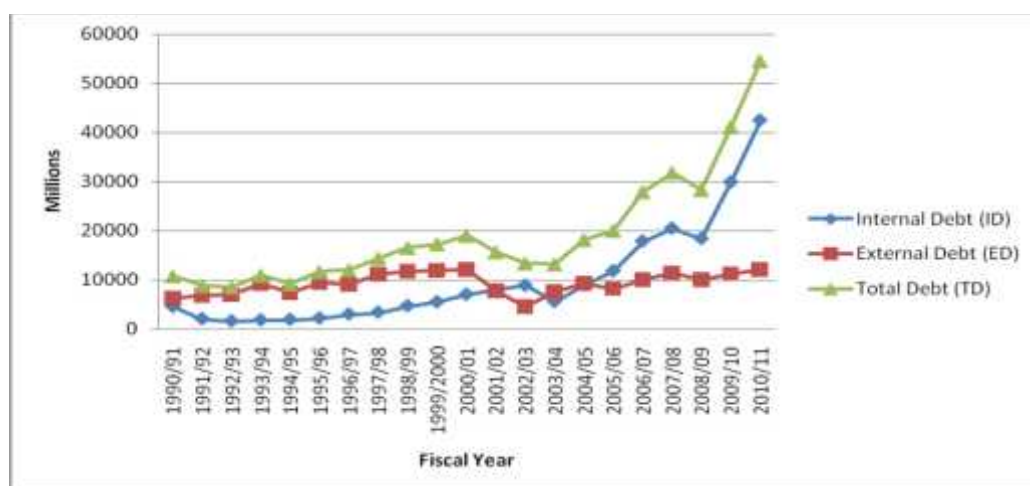
Source: Adopted and computed from Nepal government, MOF, various issues of Economic survey, FY 2009/10 and FY 2010/11 Table no.2.2, page-23.

Table 4.2 shows that the government borrowing and annual growth rate from the period 1990/91 to 2010/11. This shows that the contribution of both external and internal debt to the total debt has been in increasing trend. The average annual growth rate as percentage share of internal debt and external

debt to total debt is 40.9 and 59 respectively. The above table shows that the total debt has been increased from Rs.10809.4 million in FY 1990/91 to Rs. 54591.4 million in FY 2010/11.

The share of internal debt and external debt as percentage of GDP is 3.90 percent and 3.48 percent respectively in FY 1990/91. This has been decreased to 3.1 percent and 1.01 percent respectively in FY 2010/11. The contribution of external debt to total has been decreased from 27.3 in last year to 21.1 percent in the study period. This decreasing trend of external debt is caused due to the political instability, insurgency and terrorism.

**Figure 4.2 Trends in Government Debt in Nepal**



Source: Based on the table 4.2

The Percentage shared of external debt in total debt occupies a greater share than internal debt. Government debt basically depends upon the external debt so share of external debt in total debt is increasing in each fiscal year. We can see the trend of external debt scenario in above figure.

### 4.3 Pattern of Internal Net Outstanding Debt in Nepal

Nepal has started internal borrowing since FY 1961/62. The main purpose of borrowing the internal debt is to meet the resource gap and to mobilize the internal resources for development. Internal debt plays important role on cash flow management and to support the expenditure for development activities.

Government is receiving internal debt from various sources by means of issuing treasury bonds, treasury bills, development bonds, national saving certificates and special bonds. The annual net outstanding of internal debt has been shown in the table 4.3.

**Table 4.3 Ownership Pattern of Government Bond and Treasury Bills (Rs. in Million)**

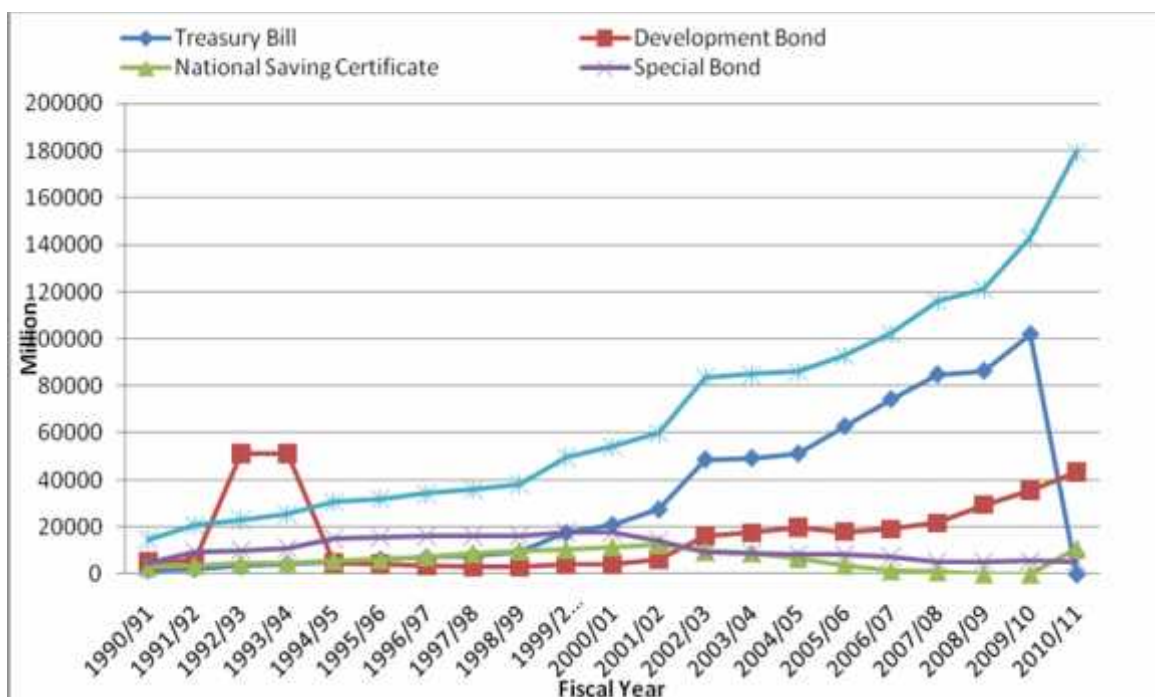
FY	Treasury Bill	Development Bond	National Saving Certificate	Special Bond	Total Outstanding Internal Debt	Percentage share of Treasury Bills	Percentage share of Development Bond	% share of National Saving Certificate	% share of Special Bond
1990/91	1821.0	5388.6	2896.5	4567.0	14673.1	12.3	36.7	19.7	31.1
1991/92	2351.0	5482.3	3646.5	9376.1	20855.9	12.5	22.1	19.6	43.4
1992/93	3483.2	51322.2	4546.3	10073.2	23234.9	17.3	20.2	19.3	39.6
1993/94	4403.2	51322.2	4901.5	11019.2	25456.1	17.0	15.4	18.6	36.0
1994/95	5216.3	4732.2	5691.5	14991.2	30631.2	19.9	12.9	18.9	46.8
1995/96	6392.5	4122.2	6076.4	15466.7	32057.8	20.9	10.7	21.5	45.3
1996/97	7142.5	3672.2	7376.5	16050.7	34241.9	22.5	8.5	24.3	44.7
1997/98	8092.5	3042.2	8736.5	16019.7	35890.9	23.9	8.6	25.7	41.7
1998/99	9182.5	3302.2	9886.4	16035.6	38406.7	35.8	6.7	21.2	32.7
1999/2000	17586.9	3872.2	10426.4	17784.1	49669.6	38.7	7.8	21.3	32.7
2000/01	21026.9	4262.2	11526.5	17541.4	54357.0	46.0	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	102365.0	71.7	18.7	1.5	8.1
2007/08	85033.1	21735.4	1116.9	5139.8	116039.5	72.2	19.8	0.9	4.2
2008/09	86515.1	29478.5	216.9	5030.0	121240.5	71.3	24.3	0.1	4.1
2009/10	102043.7	35519.4	0.00	5369.7	142932.8	71.4	24.9	0.0	3.7
2010/11	120340.7	43519.4	10680.0	5029.1	179569.2	67.0	24.2	5.9	3.7
Average Annual Growth.	–	–	–	–	–	42.7	16.6	14.0	25.9

Sources: various issues of Economic survey, FY 2009/10 and FY 2010/11 Table no.2.12, page-52. and NRB Report 2010/11.

The table 4.3 shows the pattern of internal net outstanding debt in Nepal during the period 1990/91 to 2010/11, 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 42.7 percent which is larger than others.

The percentage share of treasury bills, development bonds, national saving and special bonds are 67.0 percent, 24.2 percent, 5.9 percent and 2.8 percent, respectively in FY 2010/11. It shows the share of treasury bills has dominated in the mobilization of internal debt. The average annual growth rate of treasury bills, development bonds, national saving, and special bonds are 42.7 percent, 16.6 percent, 14.0 percent and 25.9 percent respectively. We can show the pattern of internal outstanding debt in Nepal in the following figure.

**Figure 4.3 Pattern of Internal Outstanding Debt in Nepal.**



Source: Based on the table 4.3

Figure 4.3 shows that the pattern of internal outstanding debt where the portion of treasury bills and development bond are monotonically increasing but



national saving certificates and special bonds are increasing in initial year but they are decreasing last few year.

#### **4.4 Pattern of External Debt in Nepal**

The foreign assistance in terms of grants and loans are the major sources of external financing in Nepal. Needs 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. Nepal has borrowed the external loan through bilateral and multilateral sources. Bilateral loans are loans from government and their agencies, loans from autonomous bodies and direct loans from official export credit agencies. Multilateral loans are loans and credits from multilateral agencies such as World Bank, International Monetary Fund, Regional Development Banks and multilateral and intergovernmental agencies. The pattern of bilateral and multilateral debt is shown in the following table.

**Table 4.4 Pattern of External Debt in terms of Disbursement by Major Sources**

(Rs. In Millions)

FY	Bilateral Sources	Multilateral Sources	Total External Debt	Percentage share of Bilateral Sources	Percentage share of Multilateral Sources	GDP	Bilateral Sources as % of GDP	Multilateral Sources as % of GDP	External Debt as % of GDP
1990/91	1602.8	2757.2	4360.7	36.8	63.2	116127.0	1.38	2.37	3.75
1991/92	2389.8	3879.6	6269.4	38.1	61.9	144933.0	1.65	2.68	4.33
1992/93	1307.6	4654.1	5961.7	21.9	78.1	165350.0	0.79	2.81	3.61
1993/94	582.9	8580.7	9163.6	6.4	93.6	191596.0	0.3	4.48	4.78
1994/95	717.3	6585.0	7312.3	9.8	90.2	209976.0	0.34	3.14	3.48
1995/96	460.0	9003.9	9463.9	4.9	95.1	239388.0	0.19	3.76	3.95
1996/97	850.7	8192.9	9043.6	9.4	90.6	269570.0	0.32	3.04	3.35
1997/98	1314.5	9740.0	11054.5	11.9	88.1	289798.0	0.45	3.36	3.81
1998/99	584.0	11268.4	11852.4	4.9	95.1	330018.0	0.18	3.41	3.59
1999/2000	757.9	11054.3	11812.2	6.4	93.6	366251.0	0.21	3.02	3.23
2000/01	586.7	11457.3	12044.0	4.9	95.1	394052.0	0.15	2.91	3.06
2001/02	87.0	7611.6	7698.6	1.1	98.9	425454.0	0.02	1.79	1.81
2002/03	657.2	3889.2	4546.4	14.5	85.5	444052.0	0.15	0.88	1.02
2003/04	66.0	7563.0	7629.0	0.9	99.1	473545.0	0.01	1.6	1.61
2004/05	126.5	9139.6	9266.1	1.4	98.6	517993.0	0.02	1.76	1.79
2005/06	40.6	8173.7	8214.3	0.5	99.5	630300.0	0.01	1.3	1.3
2006/07	9004.6	1048.9	10053.5	89.6	10.4	696989.0	1.29	0.15	1.44
2007/08	632.1	8347.8	8979.9	7.0	92.9	781262.0	0.08	1.71	1.14
2008/09	612.9	9356.0	9968.9	6.1	93.9	938671.0	0.07	0.99	1.06
2009/10	4550.6	6672.8	11223.4	40.5	59.5	1096038.0	0.4	0.60	1.02
2010/11	4823.7	7251.9	12075.6	39.9	60.6	1369431.0	0.3	0.5	1.01
Average Annual Growth Rate	-	-	-	15.8	84.1	-	0.4	2.3	2.6

Source: Economic Survey (2010/11) vol-2, Budget speech of MoF/GoN.

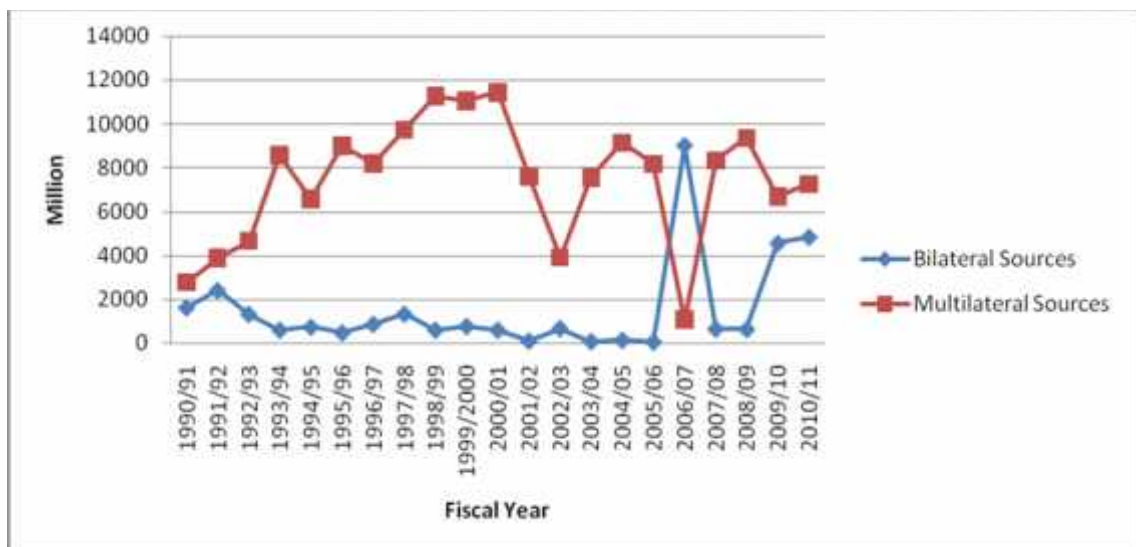
Table 4.4 shows that the pattern of external debt in terms of disbursement by major sources. The table observed that bilateral loan is in decreasing trend and multilateral loan is in increasing trend and it also reflects that the total external debt has been increasing in each fiscal year.

External debt is Rs. 4360 million in FY1990/91 which is increased to Rs. 12075.6 million in FY 2010/11. In FY 1990/91, Rs. 1602.8 million from

bilateral source and Rs. 2757.2 million from multilateral source were collected where the share is 36.8 percent and 63.2 percent respectively. In FY 2010/11, the bilateral loan has been increasing to Rs. 4 million 4823.7 and multilateral loan has been increasing to Rs. 7251.9 million where the share is 39.9 percent and 60.6 percent respectively. The average annual growth rate as percentage share of bilateral and multilateral Sources is 15.8 percent and 84.1 percent respectively.

There is high fluctuation in the both sources of external debt to GDP ratio. The average annual growth rate of bilateral sources as percentage of GDP ratio is 0.4 percent and average annual growth rate of multilateral sources as percentage of GDP ratio is 2.3 percent. Hence the annual average growth rate of total external debt as percentage of GDP is 2.6 percent.

**Figure 4.4 Pattern of External Debt in Terms of Disbursement by Major Source.**



Source: Based on the table 4.4

Figure 4.4 shows the trends of bilateral and multilateral sources of external debt where the portion of multilateral sources is very higher than bilateral sources which shows that multilateral sources is more important.

#### 4.5 Net Outstanding Debt

Net outstanding total debt means both internal and external debt after deducting repayment of principal and interest. The government has to borrow large amount of loans to meet the financial resource gap thus there is increasing trend of total net public outstanding debt in each Fiscal Year. The net outstanding debt has been shown in the following table.

**Table No. 4.5 Net Outstanding Public Debt to GDP Ratio. (Rs. in Millions)**

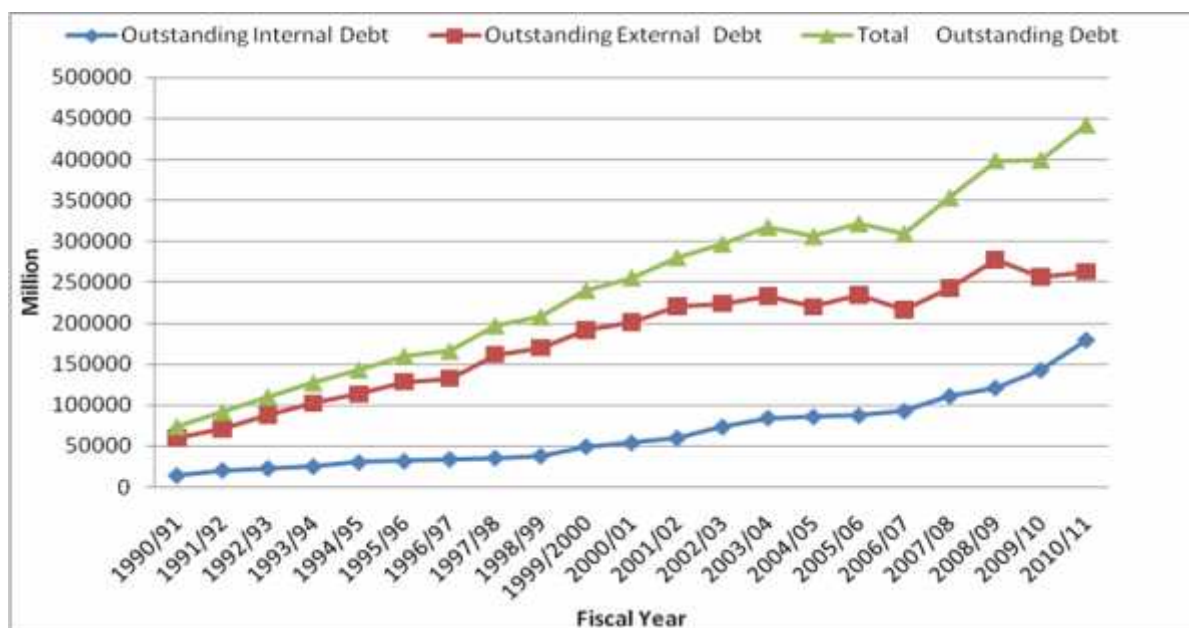
FY	Outstanding Internal Debt	Outstanding External Debt	Total Outstanding Debt	GDP	Internal Debt as % of GDP	External Debt as % of GDP	Total Public Debt as % of GDP
1990/91	14673.1	59505.3	74178.4	116127.0	12.6	51.2	63.9
1991/92	20855.9	70923.9	91779.8	144933.0	14.4	48.9	63.3
1992/93	23234.9	87420.8	110655.7	165350.0	14.1	52.9	66.9
1993/94	25456.1	101966.8	127422.9	191596.0	13.3	53.2	66.5
1994/95	30631.2	113000.9	143632.1	209976.0	14.6	53.8	68.4
1995/96	32057.8	128044.4	160102.2	239388.0	13.4	53.5	66.9
1996/97	34241.9	132086.8	166328.7	269570.0	12.7	49.0	61.7
1997/98	35890.9	161208.0	197098.9	289798.0	12.4	55.6	68.0
1998/99	38406.7	169465.9	207872.6	330018.0	11.6	51.4	63.0
1999/2000	49669.6	190691.2	240360.8	366251.0	13.6	52.1	65.6
2000/01	54357.0	200404.4	255907.6	394052.0	13.8	50.9	64.9
2001/02	60043.7	220125.6	280169.3	425454.0	14.1	51.7	65.9
2002/03	73620.7	223433.2	297053.9	444052.0	16.6	50.3	66.9
2003/04	84645.3	232779.3	317424.6	473545.0	17.9	49.2	67.1
2004/05	86133.7	219641.9	305775.6	517993.0	16.6	42.4	59.0
2005/06	87564.2	233968.6	321532.8	630300.0	13.9	37.1	51.0
2006/07	93031.9	216200.7	309232.6	696989.0	13.3	31.0	44.4
2007/08	111239.1	242060.6	353299.7	781262.0	14.2	30.9	45.1
2008/09	121240.5	277040.4	398280.9	938671.0	12.9	29.5	42.4
2009/10	142932.8	256243.3	399176.1	1096038.0	13.0	23.4	36.4
2010/11	179569.2	262252.2	441821.4	1369431.0	13.1	19.1	32.2
Average Annual Growth Rate	–	–	–		13.9	45.9	59.9

Source: Various Issues of Economic Survey(2010/11), Budget speech of MOF.

Table 4.5 shows that the net outstanding public debt. Both net outstanding internal and external public debt are monotonically increasing in each fiscal year. In FY 1990/91, net outstanding internal and external debt is Rs. 14673.1 million and Rs.59505.3 million respectively. In FY 2010/11, net outstanding internal and external debt has been increased to Rs. 179569.2 million and Rs. 262252.2 million respectively.

The average annual growth rates of internal and external debt as percentage of GDP are 13.9 percent and 45.9 percent respectively. And average annual growth rate of total public debt as percentage of GDP is 59.9 percent. In overall, the net outstanding debt share of external source is larger than internal sources. Hence, this shows that external debt dependency is increasing rapidly in each fiscal year.

**Figure 4.5 Pattern of Net Outstanding Debt in Nepal**



Source: Based on the table 4.5

The above figure shows that the pattern of net outstanding debt which shows both internal and external outstanding debt is increasing in every fiscal year. But the trend of increasing rate of external outstanding debt is higher than internal outstanding debt.

#### 4.6 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 as percentage of fiscal deficit has shown in the following table.

**Table No. 4.6 Percentage of Debt in Fiscal Deficit (Rs. in Millions)**

FY	Internal Debt	External Debt	Total debt	Fiscal Deficit	Foreign Grants	Annual Growth rate of Deficit	ID as % of Deficit	ED as % of Deficit
1990/91	4552.7	6256.7	10809.4	10655.1	2164.8	-	42.7	58.7
1991/92	2078.8	6816.9	8895.7	11261.7	1643.8	5.7	16.1	52.8
1992/93	1620.0	6920.9	8540.9	11950.0	2793.3	22.0	10.3	43.9
1993/94	1820.8	9163.6	10984.4	11623.0	2393.6	-11	13.0	65.4
1994/95	1900.0	7312.3	9212.3	10547.7	3937.1	3.3	13.1	50.5
1995/96	2200.0	9463.9	11663.9	13824.2	4825.1	28.8	11.8	50.7
1996/97	3000.0	9043.6	12043.6	14361.9	3988.3	9.1	14.7	44.4
1997/98	3400.0	11054.6	14454.4	17777.8	5402.6	13.9	14.7	47.7
1998/99	4710.0	11652.4	16562.4	17991.4	4336.6	-3.7	21.1	53.1
1999/2000	5500.0	11812.2	17312.2	17667.0	5711.7	4.7	23.5	50.5
2000/01	7000.0	12044.0	19044.0	24188.1	6753.4	32.3	22.6	38.9
2001/02	8000.0	7698.7	15698.7	22940.6	6686.2	-4.2	27.0	26.0
2002/03	8880.0	4546.4	13426.4	16437.1	11339.1	-6.2	32.0	16.4
2003/04	5607.8	7629.0	13236.0	15828.2	11283.4	-2.4	20.7	28.1
2004/05	8938.1	9266.0	18204.1	18046.5	14391.2	19.6	27.6	28.6
2005/06	11834.2	8214.4	20048.6	24779.6	13827.5	19.0	30.7	21.3
2006/07	17892.3	10053.5	27945.8	30091.7	15800.8	21.4	39.0	21.9
2007/08	20500.0	11325.5	31825.5	32642.0	20735.3	8.47	62.8	34.7
2008/09	18417.1	9968.9	28386.0	49804.7	26382.8	52.6	36.9	20.0
2009/10	29914.0	11223.4	41137.4	41197.4	38546.0	-17.3	72.6	27.2
2010/11	42515.8	12075.6	54591.4	48669.1	57997.8	10.1	87.3	24.8
Average Annual Growth Rate	-	-	-	-	-	9.8	27.6	39.1

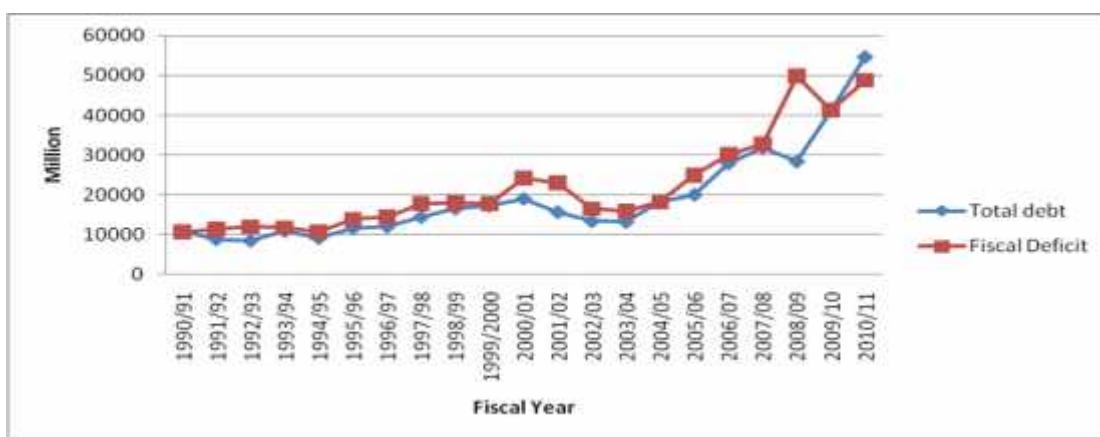
Source: , various issues of Economic survey, FY 2009/10 and FY 2010/11

Table no.2.9, page-44.

The table depicts the raising of total public debt. Total debt in FY 1990/91 is Rs. 10809.4 million which has been increased to Rs.54591.4 million in FY 2010/11. In FY 2010/11 both internal and external debt are increased to Rs.42515.8 million and Rs.12075.6 million respectively. The deficit has been also increased to Rs. 48669.1 million. The average annual growth rate as percentage of total debt to fiscal deficit is 9.8 percentage.

The internal debt had occupied 42.7 percent of deficit where as external debt had occupied 58.7 percent in FY 1990/91 and in FY 2010/11 the internal debt has occupied 87.3 percent where as external debt has occupied 24.8 percent. The scenario indicates that the government's growing reliance on external loan for meeting the ever increasing fiscal deficit.

**Figure No: 4.6 Pattern of public Debt and Fiscal Deficit**



Source: Based on the table 4.6.

Figure 4.6 shows the trend pattern of public debt and fiscal deficit. Both are in increasing trend. When total debt increases fiscal deficit also increases.

#### **4.7 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 irrigation, drinking water, health education, road and electricity are deprived of resources. Secondly, debt servicing of external debt involves the scarcest resource, the foreign exchange. It curbs the capacity to import important capital goods needed for the country. Nepal has

taking huge amount of external and internal loan with the obligation of future repayment. In Nepalese context, 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.

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 1990/91 to 2010/11.

**Table No. 4.7 Internal and External Debt Servicing in Nepal**  
(Rs. In Millions)

FY	Internal Debt Servicing	External Debt Servicing	Total Debt Servicing	GDP	Internal Debt Servicing as % of GDP	External Debt Servicing as % of GDP	Total Debt Servicing as % of GDP
1990/91	1320.9	1086.5	2407.4	116127.0	1.1	0.9	2.1
1991/92	2132.2	1664.9	3797.1	144933.0	1.5	1.1	2.6
1992/93	2428.6	2131.9	4560.5	165350.0	1.5	1.3	2.8
1993/94	2397.1	2488.7	4885.8	191596.0	1.3	1.3	2.6
1994/95	3098.6	2984.7	6083.3	209976.0	1.5	1.4	2.9
1995/96	3411.0	3304.3	6715.3	239388.0	1.4	1.4	2.8
1996/97	4177.5	3349.4	7526.9	269570.0	1.5	1.2	2.8
1997/98	3481.6	4201.2	7682.8	289798.0	1.2	1.4	2.7
1998/99	3977.5	4745.5	8723.0	330018.0	1.2	1.4	2.6
1999/2000	4712.5	5321.4	10033.9	366251.0	1.3	1.5	2.7
2000/01	4193.2	6201.4	10394.6	394052.0	1.1	1.6	2.6
2001/02	5637.8	6567.5	12205.3	425454.0	1.3	1.5	2.9
2002/03	8663.4	7519.2	16182.6	444052.0	2.0	1.7	3.6
2003/04	9424.9	7908.9	17333.8	473545.0	2.0	1.7	3.7
2004/05	11651.4	8099.9	19751.3	517993.0	2.3	1.6	3.8
2005/06	11271.7	9150.8	20423.5	630300.0	1.8	1.5	3.3
2006/07	13321.8	9594.5	22916.3	696989.0	1.9	1.4	3.3
2007/08	15900.7	10014.7	25915.4	781262.0	2.0	1.3	3.3
2008/09	8713.8	12494.0	21207.8	938671.0	0.9	1.3	2.3
2009/10	7689.3	13201.1	20890.4	1096038.0	0.7	1.2	1.9
2010/11	5574.1	13481.1	19055.2	1369431.0	0.4	0.9	1.3
Average Annual Growth Rate	-	-	-	-	1.5	1.4	2.8

Source: Various Issues of Economic Survey (2010/11), Budget speech of MOF.



Note: External Debt Servicing= Repayment + Interest payment.

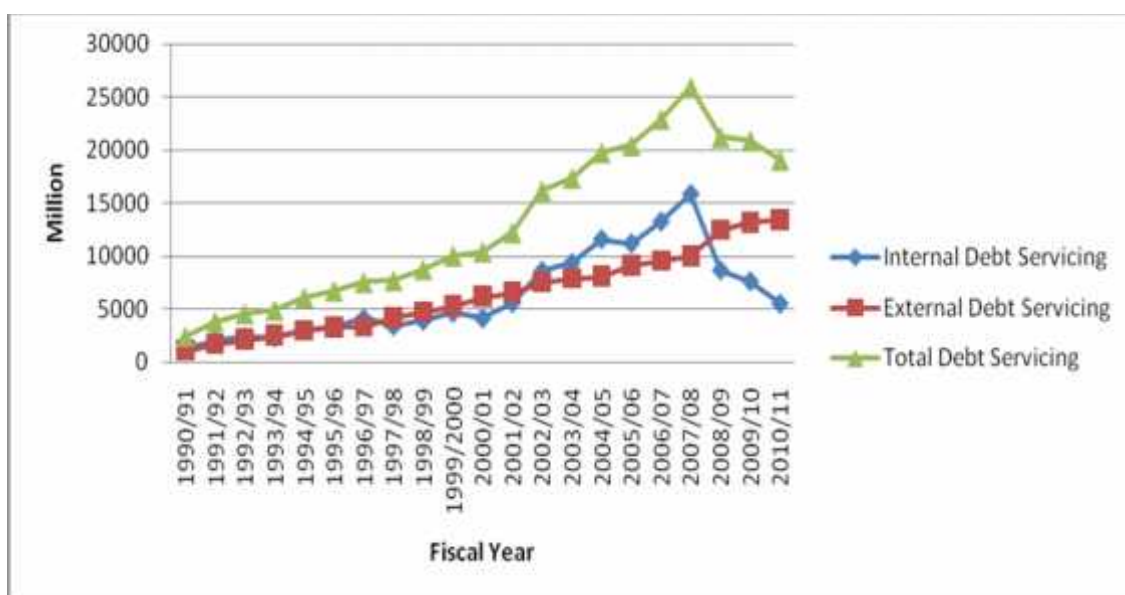
Internal Debt Servicing= Total Debt servicing - External Debt Servicing.

Total Debt Servicing = Interest payment + Principle Repayment.

Table 4.8 shows that the total debt servicing is increasing rapidly. In the FY 1990/91, total debt servicing was Rs. 2407.4 million which has increased to Rs.20890.4 million in FY 2009/10.

The increasing rate of internal debt servicing is greater than external debt servicing. The average annual growth rate of internal debt servicing as percentage of GDP is 1.5 percent, external debt servicing as percentage of GDP is 1.4 and total debt servicing as percentage of GDP is 2.8 percent in FY 2009/10. This shows that burden of internal debt servicing is growing rapidly than burden of external debt servicing. Thus to remove this problem of burden proper debt management is necessary in Nepal.

**Figure 4.7: Pattern of Internal and External Debt Servicing**



Source: Based on the table 4.7

Figure 4.7 shows the internal debt, external debt and total debt servicing in Nepal. This shows both internal and external debt servicing are increasing in each fiscal year.

#### **4.8 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. Table shows the total debt servicing and total external debts servicing and their percentage share in regular expenditure.

**Table 4.8 Regular Expenditures and Debt Servicing.**

(Rs. in Millions)

Fiscal Year	Regular Expenditure (R.E.)	Annual growth rate of R.E.	Total Debt Servicing	External Debt Servicing	Total Debt Servicing as the % of R.E.	External Debt Servicing as % of R.E.
1990/91	7570.3	13.5	2407.4	1086.5	31.8	14.3
1991/92	9905.4	30.8	3797.1	1664.9	38.3	16.8
1992/93	11484.1	15.9	4560.5	2131.9	39.7	18.6
1993/94	12409.2	8.1	4885.8	2488.7	39.1	20.1
1994/95	19265.1	55.2	6083.3	2984.7	31.6	15.5
1995/96	21561.9	11.9	6715.3	3304.3	31.1	15.3
1996/97	24181.1	12.1	7526.9	3349.4	31.1	13.9
1997/98	27174.4	12.4	7682.8	4201.2	28.3	15.5
1998/99	31047.7	14.3	8723.0	4745.5	28.1	15.3
1999/2000	34523.3	11.2	10033.9	5321.4	29.1	15.4
2000/01	42769.2	23.9	10394.6	6201.4	24.3	14.5
2001/02	48590.0	13.6	12205.3	6567.5	25.0	13.5
2002/03	54973.0	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	12494.0	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
Average Annual Growth Rate	-	17.4	-	-	28.7	14.1

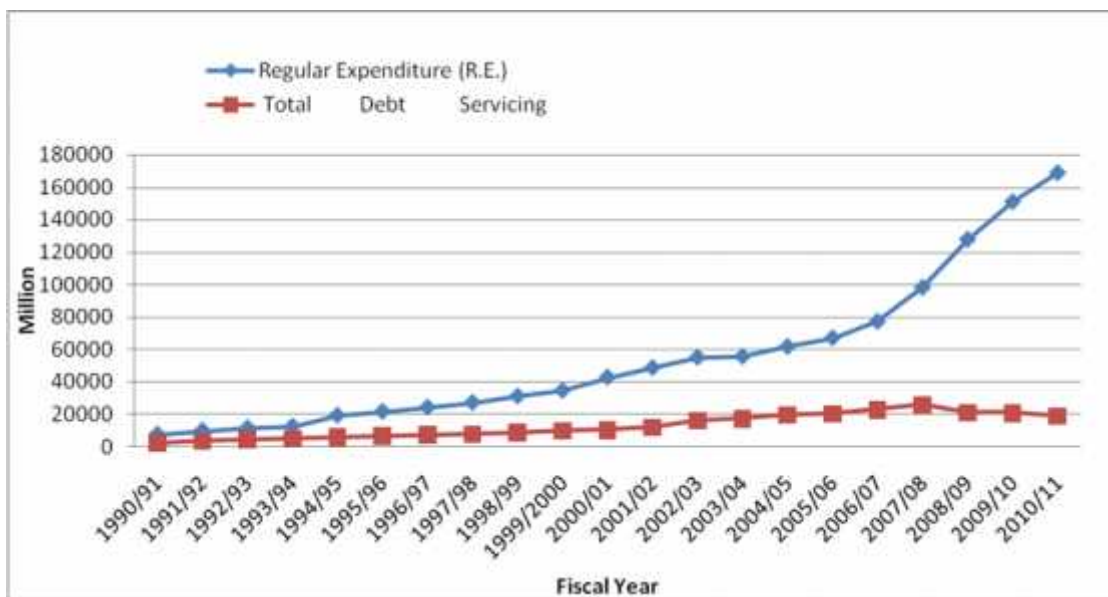
Source: various issues of Economic survey, FY 2009/10 and FY 2010/11 Table no.2.4, page-29. and NRB Report 2010/11

In the year 1990/91 total debt servicing was Rs.2407.4 million, which was 31.8

percentage of regular expenditure of that year. Total debt servicing was decreased and reached 13.8 percentage of regular in expenditure in the FY 2010/11. The average annual growth rate of regular expenditure is 17.4 percent and average annual growth rate of external debt servicing as percentage of regular expenditure is 14.1 percent in the FY 2010/11. The average annual growth rate of regular expenditure is greater than average annual growth rate of external debt servicing as percentage of regular expenditure.

On the other hand, the external debt servicing was Rs. 1086.5 million in the FY 1990/91 which is 14.3 percent of regular expenditure. The portion of external debt servicing an average in total regular expenditure becomes 14.1 percent in the study period. This growth of debt servicing shows the dangerous symptoms for country's economy.

**Figure 4.8 Patterns of Regular Expenditure and Debt Servicing**



Source: Based on the table 4.8

The figure 4.8 shows the pattern of Regular Expenditure and Total debt servicing. The regular expenditure is higher than total debt servicing in each fiscal year.

#### **4.9 Trend of Foreign Aid in Development Planning**

During different plan periods, the government had tried to solve the different problems of people and different development concepts have been initiated with the help of public debt in Nepal. The following table shows the

contribution of public debt in the public sector development expenditure of the different plan periods. The table 4.9 shows the trend of foreign aid in different development planning.

**Table 4.9 Share of Foreign Aid in Development Expenses in Economic Plans**

(Rs. in millions)

Plan period	Development Expenditure	Foreign Aid	Foreign Aid as % of Dev. Exp.
First plan (1956-61)	382.9	382.9	100.0
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	45.0
Fifth plan (1975-80)	8870.6	4264.1	48.1
Six plan (1980-85)	21750.0	13260.0	60.1
Seventh plan (1985-90)	48345.4	23978.5	49.6
Eight plan (1992-97)	113519.1	74355.0	65.5
Ninth plan (1997-2002)	189580.0	111548.0	58.8
Tenth plan (2002-2007)	234029.0	127311.7	54.4
Three year Interim plan (2007/08-2009/10)	178990.0	140660.0	78.6

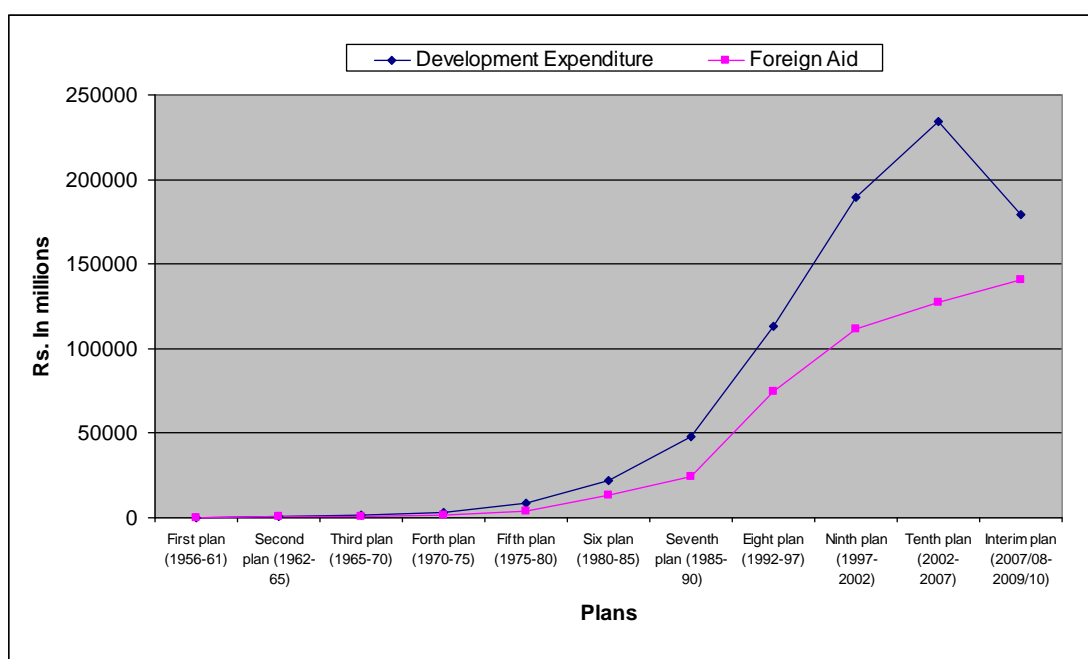
Source: Tenth plan NPC and Three year interim plan

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 and reached 65.5 percent and 58.8 percent in the Eight Plan and Ninth Plan respectively. Then it decreased to 54.4 percent in Tenth Plan. The portion of foreign aid in the development expenditure in the Three Year Interim Plan estimated to be 78.6 percent.

So, it shows that without public debt country could not have afforded development plans in real measures.

Nepal, today, finds massive external support for construction, trading, social development, institution building and humanitarian consideration from both multilateral and bilateral source. So the external assistance has great contribution in the economic development of Nepal and it function to bridge the gap between capital requirements and domestic capacity for saving.

**Figure No. 4.9 Pattern of Development Expenditure and Foreign Aid**



Source: Based on the table 4.9

Figure 4.9 shows the pattern of Development expenditure and Foreign Aid. Development expenditure is higher than Foreign Aid in each plan period.

#### 4.10 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 arises 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 because:

- ) Productivity is 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.
- ) 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. Table 4.5 shows the trends of average annual growth rate of internal debt is 40.9 percent of Total Debt, but external debt is 59.0 percent of Total Debt. It has the great place as a source of financing trade deficit, fiscal deficit as development expenditure is increasing day by day.

The average annual growth rate of total outstanding public debt is nearly 59.9 percent of GDP (Table 4.6) in the one hand, and the average annual growth rate of total debt servicing to GDP ratio is nearly 2.8 percent (Table 4.8). This shows that debt is mounted in very high amount in each year. The average annual growth rate of debt servicing to regular expenditure is remained at 28.7 percent and only external debt servicing is 14.1 percent (Table 4.9). Corruption and use of low quality manpower misuse the high amount of aid. Aid projects are implemented on the donor priorities. There are no scientific systems of aid which are neither effective nor productive. Due to such weaknesses, the government of Nepal would fall into debt trap. The main reasons behind this situation are as follows:

- ) When borrowed money is used for repayment for principal and payment of interest.
- ) When large amount of loan is allocated for regular expenses.
- ) When the borrowed amount exceeds the debt bearing capacity of the country.

) When high portion of loan is set-aside for meeting current expenditure.

The resource gap is increasing rapidly with the growing trend of regular expenditure and development expenditure. Around 60 percent of the development expenditure is financed through foreign aid where more than 70 percent of foreign aid has composed of loans. This shows the significance of foreign loan in the economic development but less than 50 percent of development expenditure is allocated for capital formation and large amount of loan is devoted to meet recurring expenses within the development expenditure. So less amount of loan is spreading for increasing the productive capacity of the Nepalese economy.

In recent years it is observed that rapidly increasing size of Nepal's public debt is a matter of serious concern. So it needs a careful look on the increasing magnitude of public debt and proper care to be taken to increase the debt servicing capacity of the country. When country indebted heavily, it can not pay the external loan in key currencies. Consequently, it falls into debt trap. To prevent from debt trap growth rate of productivity of public debt and the rapid economic growth is essential.

#### **4.11 Relationship between GDP and Public Debt in Nepal**

To study the trend and pattern of external debt and internal debt on the economic development of Nepal, the present study has used regression equation by using ordinary least-square method. Regression equation is used to analyze the cause and effect relationship between GDP with internal debt (ID) and external debt (ED). In statistical analysis, number in parenthesis below indicates the t values of the coefficients. 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 trend and pattern of external and internal debt on the economic development of Nepal. Regression equation in this chapter is conducted by using SPSS

program.

### **Relationship between GDP and Internal Debt in Nepal**

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

$$Y = a_0 + a_1 X_1 \dots\dots\dots 1$$

Where, Y = GDP (Dependent Variable)

$X_1$  = Internal Debt (Independent Variable)

$a_0, a_1$  = Regression parameters

The result of this regression model is:

$$Y = 152267.058 + 33.833 X_1$$

(5.722)            (14.300)

$$R^2 = 0.919 \qquad F\text{-test} = 204.479$$

#### **Interpretation of the result:**

The fitted equation above shows that there is positive relationship between GDP (Y) and Internal Debt ( $X_1$ ) which means when Internal Debt increases than GDP increases. The coefficient of determination  $R^2$  is 0.919 which means that 91.9 percent of variation of GDP (Y) is determined by the explanatory variables i.e. Internal Debt. In other words, if we are trying to explain what may effect to GDP. There might be others factors that can explain this variation, but above model which include only Internal Debt can explain 91.9 percent of it. This means that 8.1 percent of the variation in GDP cannot be explained by Internal Debt alone. Therefore, there must be other variables that have an influence also. Similarly, the calculated F-value is 204.479 at 5 percent level of significance which is greater than tabulated F-value 5.27 which implies that the model is statistically very significant. We conclude that there is a significant change in the average GDP of Nepal due to total Internal debt



obtained the data from 1990/91 to 2009/10.i.e.the GDP changed in the given periods due to total internal debt.

Examining the equation, we conclude that total internal debt has positive impact in GDP Growth of Nepal. Hence, it is positively contributing to the growth of National output.

### **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<sub>2</sub> which is as:

$$Y = a_0 + a_1 X_2 \dots\dots\dots 2$$

The result of this regression model is:

$$Y = -19202.036 + 50.177 X_2$$

-(0.074)      (1.797)

$$R^2 = 0.152 \qquad F\text{-test} = 3.231$$

Where, Y = GDP (Dependent Variable)

X<sub>2</sub> = External Debt (Independent Variable)

a<sub>0</sub>, a<sub>1</sub> = Regression parameters

### **Interpretation of the result:**

The estimated coefficients of equation (2) have expected sign. Both the coefficients are statistically significant at 5 percent level. The equation itself is good fit, with 15.2 percent of the variations in dependent variable being explained by the independent variable. Hence, the growth in External debt have positive impact over growth of output, this relationship is statistically significant. Thus our hypothesis two, H<sub>A2</sub> is justified and two H<sub>O2</sub> is rejected by this study.

## Relationship 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

$$Y = a_0 + a_1 X \quad \dots\dots\dots 3$$

Where, Y = GDP (Dependent Variable)

X = Total Debt (Independent Variable)

The result of this equation is:

$$Y = -82105.970 + 29.658 X$$

$$(-1.769) \quad (12.398)$$

$$R^2 = 0.895 \quad F\text{-test} = 153.722$$

### Interpretation of the result:

The fitted equation above shows that there is positive relationship between GDP (Y) and Total Debt (X) which means when Total Debt increases than GDP (Y) also increases. The coefficient of determination  $R^2$  is 0.895 which means that 89.5 percent of variation of GDP (Y) is determined by the explanatory variables i.e. Total Debt. Similarly, the calculated F-value is 153.722 at 5 percent level of significance which is greater than tabulated F-value 4.71 which implies that the model is statistically very significant. To test the significance of regression coefficient, the t- test is used with at 5 percent level of significance at n-1 degree of freedom. This empirical investigation concludes that total debt is significantly affecting GDP. Thus 3<sup>rd</sup> hypothesis  $H_{A3}$  is justified and three  $H_{O3}$  is rejected. The analysis of this chapter reveals that there exist significant positive relationship between External Debt, Internal Debt and Total Debt with Gross Domestic Product (GDP). Higher external debt is associated with higher Domestic output and vice versa.

To sum up there is positive relationship between public debt and GDP. There

should be increased the volume of public debt which increases the volume of GDP. Thus, public debt has positive impact upon GDP which helps to improve the economic condition of the country.

## **CHAPTER FIVE**

### **PROBLEMS AND PROSPECTS OF PUBLIC DEBT IN UNDERDEVELOPED COUNTRIES**

#### **5.1 Problems of Public Debt in Underdeveloped Countries**

Nepalese government faces some problems in effecting their borrowing programs. Large scale of public borrowing for financing development expenditure may be justified but the resultant rise in public debt raises the burden. In Nepal both internal and external borrowings have been increasing rapidly each and every fiscal year. The rapidly increasing magnitude of public debt leads to increasing debt servicing problem in the same pace. The government expenditure has increased more rapidly than government revenue because of the limited resources of revenue so the government has borrowed from internal and external sources. The growing trend of borrowing creates a great problem for debt management. In case of an external loan a transfer problem is involved, both in its receipt and in its repayment. In either case the terms of trade may be affected, depending upon the reciprocal urgency of demand.

Especially, in developing countries there are no organized capital and money markets and, where they exist, they constitute a very small portion of the total capital and money markets in the country. Also, there may be no organic relationship between the organized and unorganized markets. Besides, the inadequate to fulfill the capital needs of the economy.

Special difficulties of public borrowing in the under-developed countries arise from the fact that the people have a predilection in favor of investment in real estate, that gives them social prestige and for jeweler because it can be easily concealed and can be easily converted into cash in case of need.

A substantial volume of savings in these countries originates in the rural sector but these people have no tradition of investment trade and industry. The rural saving cannot be mobilized effectively because rural incomes do not move

through monetary channels. That is why most of the financial institutions are concentrated in the urban areas. Also, agricultural interests are entrenched strongly, politically and resist all proposals to tax them. The prevalence of very high rates of interest militates against the flow of funds towards agricultural improvements, savings accounts, government bonds, small-scale industry or other channels of investment where the yield cannot be so high. The response to government securities is also poor because of rising prices which reduce the value of the yield from government securities.

Developing countries have less economic and political relation with developed countries for the external borrowing and have less capacity to pay the dues on the other. The main reason is that most part of expenses used for unproductive purpose which decrease the believe ness then further providing of borrowing is less possible. Other factors are political instability, low level of debt servicing capacity, unproductive expenses, corruption etc. Due to all these factors, donors have less intensive for providing loan and grants

To sum up although there are various difficulties and limitations, public borrowing remains a powerful instrument of resource mobilization. It is not only a necessary supplement to taxation but also very desirable form of capital mobilization.

## **5.2 Prospects of Public Debt in Underdeveloped Countries**

A developing economy like Nepal has to tap all possible sources to mobilize sufficient financial resources for the implementation of its economic development plans. It has to utilize revenue surplus for the purpose, seek external aid, and pitch up its level of taxation and public borrowing in addition. But public borrowing can be used one of the major instruments of resource mobilization.

Thus, in an underdeveloped economy, public borrowing, if prudently managed and skillfully operated, can become a powerful instrument of economic development. Besides, growing public debt provides the people opportunities

to hold their wealth in the form of safe and stable income-yielding assets, i.e., government bonds.

Growth and composition of public debt provides the monetary authorities with assets which they can manipulate to give effect to a monetary policy considered desirable in the context of economic development. Thus, monetary policy, which is considered essential for achieving the objectives of economic policy, becomes vitally related to public debt management. The management of public debt is used as a method to influence the structure of interest rates. Thus, a growing public debt, in an underdeveloped economy, has become a powerful tool of developmental monetary policy.

There are two prospects to raise the resources through public loans: (a) Market borrowing, i.e., sales to the public of government bonds (long-term loans) and treasury bills (short-term loans) in the capital market, (b) Non-market borrowing, i.e., issue to the public of debt which is not negotiable and is not bought and sold in the capital market, e.g., issue of national savings certificates and national plan bonds and accepting deposits in the government post offices.

In case of backward countries, because of low income, the volume of internal savings is insufficient to finance development projects. Incomes, on the other hand, are low because of low capital investment. A vicious circle is thus created which can break by raising foreign loans. Through the device of foreign loans the capital resources of the world also more fully and more economically employed.

## CHAPTER SIX

### SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

#### 6.1 Summary:

Public debt is the widely accepted measure for financing government expenditure. It is the loan taken by the government to meet growing expenditure. 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. Now Nepal 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 sources treasury bills, special bonds, development bonds and national saving certificates are included. Large portion of internal debt is taken from banking sectors. Similarly, in external sources Nepal is receiving borrowing in the form of bilateral and multilateral sources such 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 resources, it is not sufficient to promote the rapid development of the Nepalese economy. Thus, external debt financing contributes significantly to the development external of Nepal.

As we know 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.

Nepal is indebted by both internal and external loans but highly indebted by external servicing. Thus, its proper management has been a challenging task for Nepal. So the 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. Otherwise, Nepal is going to face debt crisis in the future in which debt bearing obligations would become impediments to the balanced management of the economy.

## **6.2 Major Findings:**

- J In the study period from 1990/91 to 2010/11, the government revenue has increased from Rs. 10729.7 million to Rs. 199819.0 million with the average annual growth rate of revenue is 15.3 percent. In the same period, the expenditure has increased from Rs. 23549.8 million to Rs. 295363.4 million with the annual average growth rate of 13.1 percent. But the growth rate of revenue is not sufficient for financing the increased government expenditure.
- J The gap between revenue and expenditure was Rs. 12879.9 million in FY 1990/91 and it has increased to Rs. 95544.4 million in FY 2010/11. The resource gap has been increasing in each year that shows there is excessively increase in government expenditure than government revenue which leads the revenue gap.
- J The amount of internal debt was Rs. 4552.7 million in 1990/91 and it has increased to Rs. 42515.3 million in FY 2010/11. Similarly, the amount of external debt was Rs. 6256.7 million in FY 1990/91 and it has increased to Rs. 12075.6 million in FY 2010/11. Percentage share internal debt and external debt in total debt in FY 1990/91 was 40.9 and 59.0 percent respectively. Internal debt has increased to 77.8 percent and external debt has decreased to 22.1 percent. But the average annual growth rate of internal debt is 40.9 and external debt is 59.0 percent. Thus the portion of external debt has been increasing in each fiscal year.



- ) Total external debt was Rs. 4360.0 million in FY 1990/91 in which Rs. 1602.8 million was taken from bilateral and Rs. 2757.2 million from multilateral sources. It has gone up to Rs. 12075.6 million where Rs. 4823.7 million from bilateral and Rs. 7251.9 million from multilateral sources. In the study period the share of bilateral sources is 39.9 percent and share of multilateral sources is 60.6 percent.
- ) Average annual growth rate of total external debt as a percentage of GDP is 2.6 percent where as percentage share of bilateral and multilateral sources is 0.4 percent and 2.3 percent respectively. This shows that the external debt is heavily depend upon multilateral sources.
- ) The outstanding internal and external debts in FY 1990/91 were Rs. 14673.1 million and Rs. 59505.3 million respectively. But in FY 2010/11, both outstanding internal and external debt is Rs 179569.2 million and Rs. 262252.2 million respectively. The annual average growth rate of internal and external debt as percentage of GDP is 13.9 percent and 45.9 percent.
- ) In FY 1990/91, fiscal deficit was Rs. 10655.1 million which is increased to Rs. 48669.0 million in FY 2010/11. The fiscal deficit is increasing in each fiscal year. The annual average growth rate of deficit is 9.8 percent.
- ) The total debt servicing was Rs. 2407.4 million in FY 1990/91 which has increased to Rs. 19055.2 million in FY 2010/11. During the period between 1990/91 to 2010/11, the average annual growth rate of total debt servicing as percentage of GDP is 2.8 percent. In that period the average annual share of percentage of internal debt servicing is more than external debt servicing.
- ) Development expenditure has been increasing in each period of plan. In First Plan development expenditure was Rs. 382.9 million which is increased to Rs. 178990.0 million in Interim Plan. Foreign Aid is also increasing from Rs. 382.9 million in First Plan to Rs. 140660.0 million in Interim Plan which is 78.6 percent of development expenditure.

### **6.3 Conclusion:**

This study has analyzed the trend and pattern of government borrowing on economic development. The government expenditure has increased more rapidly than government revenue because of the limited resources of 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 major challenging 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 country.

The degree 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 increase rapidly in each year but debt servicing capacity of the economy is not increasing in the same pace.

In course of research, it was found that government borrowing has been increased unlikely and financed mostly on the unproductive sectors including uncertainties, high expenditures and hence government always lacks the resources then borrows the new loan to pay the previous ones. That's why, the public debt and its interest is mounting rapidly, but addressing capacity for redemption the debt is not increasing in the same pace.

The study clearly shows the facts that the average annual share of outstanding debt as a percentage of GDP is almost 60.6 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 impact on GDP growth of Nepal. That is 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 from where we cannot escape from it.

#### **6.4 Recommendations:**

On the basis of above findings, the following are the purposed 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 external sources. So for reducing the volume of borrowing and maximizing revenue collection government should adopt transparent and effective tax policy by improving tax administration. Government should maintain the strong fiscal discipline. It most set and implements the effective legal system to control the ever-increasing corruption, unnecessary expenses, and improper allocation of resources. This might contribute to control growing unproductive and useless expenses in one side and increased revenue on the other side. Government efforts should be directed towards mobilizing internal resources and thus to reduce dependency on loans for financing development expenditure.

) **Government should try to receive more grants rather than the loans.**

The government should try to get the grants more and more as far as possible. There is more domination on bilateral grants. The government also should maintain such external policy so that more grants should be received rather than the loans.

) **Increase the Debt servicing capacity of the country.**

To increase Debt servicing capacity, Government should increase GDP growth, revenue growth and export earnings growth in sustainable path so that country will not trapped on debt servicing problem. Government should be conscious for falling the country into debt trap. To prevent

from debt- trap government should create new debt servicing capacity. The inflowing loan should utilized as possible as productive and currency earning areas.

) **Proper attention should be given to the macro-economic stability of the country.**

Nepal has so many underdeveloped areas, where the role of government is dominating. Government should maintain the balance between urban and rural sectors, agricultural and industrial sectors, traded and non-traded sectors. The maintenance of such various unbalanced sectors of the economy should be done through control of unproductive expenditure, big push through capital and proper utilization of resources of the underdeveloped areas. And Government reduces foreign dependency, various measures must be applied such as export promotion, tourist attraction and import substitution policy should be emphasized and import of capital goods should be increased for the productive purpose.

## APPENDICES

### Relationship between Public Debt and GDP Regression

#### Relationship between Internal Debt and GDP.

#### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.959 <sup>a</sup>	.919	.915	79281.662	.919	204.479	1	18	.000	1.458

a. Predictors: (Constant),  
Internal Debt

b. Dependent Variable:  
Gross Domestic Product

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.285	1	1.285	204.479	.000 <sup>a</sup>
	Residual	1.131	18	6.286		
	Total	1.398	19			

a. Predictors: (Constant), Internal Debt

b. Dependent Variable: Gross  
Domestic Product

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	152267.058	26611.536		5.722	.000
	Internal Debt	33.833	2.366	.959	14.300	.000

a. Dependent Variable: Gross  
Domestic Product

**Relationship between External Debt and GDP.**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.390 <sup>a</sup>	.152	.105	256644.807	.152	3.231	1	18	.089	.198

a. Predictors: (Constant), External Debt

b. Dependent Variable: Gross Domestic Product

**ANOVA<sup>b</sup>**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	2.128	1	2.128	3.231	.089 <sup>a</sup>
Residual	1.186	18	6.587		
Total	1.398	19			

a. Predictors: (Constant), External Debt

b. Dependent Variable: Gross Domestic Product

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-19202.036	259702.933		-.074	.942
	External Debt	50.177	27.915	.390	1.797	.089

a. Dependent Variable: Gross Domestic Product

**Relationship between Total Debt and GDP.**

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	

1	.946 <sup>a</sup>	.895	.889	90241.012	.895	153.722	1	18	.000	1.407
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a. Predictors: (Constant),  
Total Debt

b. Dependent Variable:  
Gross Domestic product

#### ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.252	1	1.252	153.722	.000 <sup>a</sup>
	Residual	1.466	18	8.143		
	Total	1.398	19			

a. Predictors: (Constant), Total Debt

b. Dependent Variable: Gross Domestic  
Product

#### Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-82105.970	46409.704		-1.769	.094
Total Debt	29.658	2.392	.946	12.398	.000

a. Dependent Variable: Gross  
Domestic Product

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