

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 was not heard of prior to the 18th 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 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 become an important tool. Prof. J.M. Keynes is in favor of government regulated economy that push government deficit. To meet the deficit budget government needs to undertake the public debt which need not 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 is 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 seen 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 the 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

Nepal has natural resources such as mineral, water, forest, land etc. But these resources cannot be proper 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 Nepalese economy debt burden was estimated to be RS. 200 billion in 2002 (Sharma, 2002).

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 1984/85 to 2003/04. 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 challenging 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 impact 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 pattern and situation of public debt in Nepalese economy?
2. Is public debt inevitable source of resource mobilization for economic development?
3. What is the impact of public debt on Nepalese economy?
4. How can we collect the public debt; external as well as internal?

1.3 Objective of the Study

Generally this study is focused the pattern and impact of public debt in the economic development of Nepal. But especially this study tries to fulfill the following objectives.

To examine the role of public debt in economic growth (GDP) of Nepal.

To study the overall pattern 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

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. Debt is needed for economic development but effective and appropriate utilization of debt is the matter of concerned.

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 1985/86 to 2006/07.
- This study has not attempted to examine the effect of public borrowing on macro economic variables such as money supply, price level, employment, and etc.

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 is included the general background, statement of problems, object of study, significant of study and limitation of study. Chapter Two is concerned on the literature review. In this chapter previous studies and findings have been analyzed with theoretical studies. Chapter Three describes research methodology. Chapter Four is related with the role of public debt in underdeveloped countries. Chapter Five is concerned with trend and structure of public debt. Chapter Six is related with results of empirical studies. Chapter Seven describes problems and prospects of public debt in underdeveloped countries and Chapter Eight shows summary, findings, conclusion and recommendations.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Theoretical Concept/International Context

The fund or capital is taken in the form of loan by the state from various sources is called public debt. Public debt has given great important 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 it is not so then many problems will be created and it has to be destructive and devastative one for the future generation on monetary impact on the form tax. The effect will not affect to the tax payer alone but it also see in form of decreasing productivity, demand for goods and commodities will be decreased 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 also initiated with the assistance of foreign countries and agencies. On the other hand, the internal causes of increase government expenditure and inflation made government compel to accept and take debt.

E.D. Domar has defined 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,

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

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

Therefore,

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

From the equation (iii) 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).

Public debt was not heard of prior to the 18th century. It has been discussed, included and expressed for and against it by the economists in the beginning of 19th century. Particularly the classical economists such as pigou, T.R Malthus, J.B.say, C.F Butable visualized their views against the government borrowing. They said that, “let money fruiting on the pockets of the people”. According to them state has to perform its limited activities, maintenance of law and order justices and social security. They argued that public debt creates burden in the economy because of its unproductive nature.

Classical economists advocated for a balanced budget and therefore, in their analysis public borrowing found no significant place. They were in the view that as far as possible public borrowing should be avoided and if the government is compelled to borrow, government should finance its current expenses entirely out of the taxes and only that project should be financed through public borrowing which is productive in nature so that debt would be liquidated ultimately and the whole process will be self-liquidating.

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).

The classical philosophy propounded by Adam smith and his supporters have viewed “Laissez-fair” equates a sound and balanced budgetary policy that doesn't consider the fiscal deficit and hence public borrowing. The classical says that “just as private economic units should not run into a persistent deficit,

the government should not also use persistent deficit”. Moreover they state if debts are indispensable and inevitable for a particular period of time it should be paid if as soon as possible.

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).

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 absences 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 any thing. 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 (Mookerjee, 1979; 239).

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.

Hansen contended that success or failure of public debt policy can be determined only in relation to the aggregate of national income and its distribution. Whether or not the public debt should be reduced depends on the general economic situation, not on principles applicable to private commercial accounting. Economic activity in the government sector is not sustained out of private economic activity; it is an independent sector in the production of goods and services. Government outlay financed by debt creation will increase the level of national income, regardless of the productivity of the assets which may be acquired (Mookerjee, 1979; 242).

Hansen pointed out that the limits to the public debt must be determined in relation to a nation's taxable capacity, the danger of price inflation, and the distribution of income; the limits are flexible and not fixed. The Hansenian contribution is not, however, the whole of the development of Keynesian fiscal theory. The culmination is A.P. Lerner's functional finance. This approach to fiscal policy views government revenue and expenditure and government debt solely as instruments for the control of aggregate community expenditure. These are the tools, and the goal is the maintenance of stable employment at constant prices. Taxes and expenditures should be increased or reduced solely to affect the community's rate of spending; debt instruments should be sold to the public to absorb their idle balances and reduce liquidity in times of inflation, and redeemed to increase liquidity in times of depression. Perhaps to gain currency for his views Lerner formulated his propositions in terms of 'laws' (Ibid; 243).

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 posses 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.

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).

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 seigniarage (Chelliah, 1992; 208).

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).

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).

Michael Posner points out that growth in the debt ratio causes alarm for two reasons. First, growth in debt ratio might lead to crowding out of private investment. Second, and more important, is the assumption that government spending out of borrowed funds might be unproductive. The argument is not sustainable. In fact, that part of public debt is burdensome whose servicing falls entirely or mostly on tax revenues. V.M. Dandekar is of the view that a country enters in a debt trap when its capacity to take loans falls short of interest payment obligations. Hence all public debt is not burdensome (Singh, 2001; 366).

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 (Ibid; 367).

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 macro economic 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 the critical government debt situation and highlight the difficult and the urgency of improving the government's fiscal position in the present Philippine economy (Asian Development Bank, 2005; 19).

Total indebtedness of a government, especially as evidenced by securities issued to investors. The national debt grows whenever the government operates a budget deficit that is, when government spending exceeds government revenues in a year. To finance its debt, the government can issue securities such as bonds or treasury bills. The levels of national debt varies from country to country, from less than 10% of the Gross Domestic Product (GDP) to more than double it. Public borrowing is thought to have an inflationary effect on the economy and thus is often used during recessions to stimulate consumption, investment, and employment (Britannica Ready Reference Encyclopedia, 2006; 237).

2.2 Nepalese Context:

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

Purushottam 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 these days because of payment of debt maturity can be adjusted through the issues of fresh public debt instruments. But the fact is that habit of purchasing bond issued by the government should be developed among the people (Acharya, 1968).

R.D. Singh has prepared a dissertation entitled “A Study on the Impact of internal Borrowing in Nepal” has analyzed the trend of revenue, expenditure and deficit effect of under borrowing on money supply, inflation and import etc. He also analyzed the structure of internal public debt and impact of it on the economy. He found most inflationary nature of internal borrowing to increase inflation in economy (Singh, 1983).

Great Britain at first helped Nepal to install the Pharping Hydropower Project during the region 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).

Kishor Kumar Gurugharana, in his article on “The Role of Foreign Aid in Economic Development and Poverty Allocation” has presented data of the percentage share of outstanding foreign debt in GDP at factor cost and foreign debt servicing in regular expenditure (1984/85-1993/94). He analyzed the burden of public debt as debt servicing cost in Nepal and concluded that “Although foreign loan is relatively much softer terms for Nepal compares to India and China, the very low rate of return and increasing share of loan in foreign aid imply that aid slowly pushing Nepal toward debt crisis in the coming years” (Guru-Gharana, 1996).

Guna Nidhi Sharma in his article entitled “The Growing Fiscal Imbalance in Nepal. Are We Really Falling into Debt Trap?” 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).

B. 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).

Narayan Prasad Panthi in his M.A. thesis entitled "Public Debt Situation in Nepal" has analyzed the size of overall budgetary deficits excluding grants has remained high mainly due to low revenue and very high expenditure. This has led to heavy borrowing from internal and external sources. In fact the public debt itself is neither worse nor it impairs the economy. The financing of accumulated fund on productive programs and redemption will be made through such like programs; the public debt may be the quite beneficial to the nation as it outstrip the national economy as a whole. But situation is quite adverse because the impact of the investment of borrowed fund on output has remained unsatisfactory (Panthi, 2004).

Sungsup Ra and Chang Yong Rhee in their working paper entitled “Managing the Debt Sustainability” have concluded that Nepalese public debt appears to be sustainable. The debt sustainability analysis and stress tests in this report suggest that the debt to GDP ratio will be stable at the current level over the next 5 years. The primary reason for this is that the bulk of public debt has been financed in the form of loans at favorable interest rates. Nonetheless, there

are several concerns. As seen in macroeconomic forecasts, the share of external debt in total public debt is likely to decline in the future, implying that the amount of loans will decline over the next 5 years. If the amount of loans does indeed decrease, Nepal may face higher interest rates on alternative funds. Hence, interest payments are expected to rise, in turn, increasing the debt-to-GDP ratio. A sharp and unanticipated change in the exchange rate is the most important determinant of the debt-to-GDP ratio. A sharp and unanticipated change in the exchange rate is also a threat to debt sustainability. The study found out that exchange rate is the most important determinant of the debt-to-GDP ratio. A long spell of political instability, in particular, could lead to financial turmoil in the foreign exchange market as well as a decline in the supply of funds from abroad (Sungsup Ra and Chang Yong Rhee, 2005).

Rajendra Bhandari in his M.A. thesis entitled “Public Debt in Nepal: An Analysis of Trends and Structure” has stated 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 earning. So, the growth rate of debt becomes faster and higher than the redemption of debt (Bhandari, 2006).

Nirmal Kumar Thapa in his M.A. dissertation entitled “Public Debt :Its Trend Pattern and Impact in Nepalese Economy” has concluded that government should maintain fiscal imbalance 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 imbalance 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).

Usha Ghimire in her M.A. dissertation entitled “Public Debt in Nepal: An Analysis of Trends and Structure” has concluded that the average annual growth rate of GDP, revenue and export earning 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).

Krishna Prasad Regmi in his M.A. dissertation entitled “A study on Public Debt and its Impact on Economic Growth in Nepal” has 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

Research design is the plan, structure and the strategy of investigation conceived so as to obtain answers to research questions. This research work is design 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 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, Dw-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 (2007/08), Ministry of Finance (MOF), World Bank (WB), Nepal Government (NG), Quarterly Economic Bulletin published by Nepal Rastra Bank (NRB) and other bulletins and publications like budget speech, Human Development Report (HDR), World Development Report (WDR) Various publications of National Planning Commission (NPC) are also used for other important information.

3.3 Time Period for Study

Our empirical analysis is made covering the period of 22 years from 1985/86 to 2006/07. The time is designed taking into account the availability of data.

3.4 The Description of the Variables

-) **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.
-) **Foreign Currency Reserves:** The total value (usually expressed in dollars) or gold, currency, and special drawing rights held by a country as both a reserve and a fund from which international payments can be made.
-) **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,

$$\zeta \text{ InP}_t = \text{Inflation (InP}_t - \text{InP}_{t-1})$$

3.5 Regression Equation

Regression equation has been used mainly to analyze the relationship between dependent variable like GDP and independent variable like internal debt and external debt. It is used to show the degree and direction of the relationship between variables and it also provides a mechanism for prediction or

forecasting. The theoretical statement of this regression model is that Gross Domestic Product (GPD) 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. $Y = a_0 + a_1 X_1 + a_2 X_2$
4. $Y = a_0 + a_1 X$

Where,

Y = Gross Domestic Product (GPD)

X = Total Debt (TD)

X_1 = Internal Debt (ID)

X_2 = External Debt (ED)

a_0, a_1 and a_2 are the parameters.

3.6 Statistical Test of Significance

3.6.1 The Test of the Goodness of Fit (R^2)

R^2 is used for judging the explanatory power, which measures the dispersion of observations around the regression line. It is essential, because the closer the observations to the line, the better the goodness of fit, that is the better explanation of the variables of Y by the change in the explanatory variables. R^2 shows the percentage of the total variation of the dependent variable that can be explained by the independent variables of the multiple determinations and the square of the correlation coefficient. The formula to derive R^2 is mentioned below:

The model with k explanatory variables

$$R^2 = 1 - \frac{e^2}{y^2} = \frac{\hat{a}_i yx_i}{y^2} = \frac{\hat{a}_1 yx_1 + \hat{a}_2 yx_2 + \dots + \hat{a}_k yx_k}{y^2}$$

$$y = Y - Z\bar{Y} \quad \text{Where,}$$

$$x = X - Z\bar{X}$$

Similarly,

Adjusted (R^2) can be calculated by following formula. It is denoted by \bar{R}^2 .

$$\text{i.e. } \bar{R}^2 = 1 - \frac{e^2 / n Z k}{y^2 / n Z 1}$$

n = total number of observation Where,

k = number of parameter

3.6.2 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 will be performed to test the hypothesis in the study:

3.6.2.1 t-test

This test will be performed in order to identify the statistical significance of an observed sample regression coefficient and the formula for calculating the value is:

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

Where,

= Estimated value of a_i \hat{a}_i

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

3.6.2.2 F-test

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

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

Coefficient of determination = R^2 Where,

Number of explanatory variables = K

Number of observations in the sample = N

3.6.2.3 Durbin Watson (D.W.) Test

This test is used for detecting serial correlation. In the presence of autocorrelation (Serial Correlation) the Ordinary Least Square estimators remain no longer efficient. As a consequence usual t and f tests cannot be legitimately applied. D.W. test being a most celebrated test can be computed as:

$$D.W. (d) = \frac{\sum_{i=1}^n (e_i - Z e_{i-1})^2}{\sum_{i=1}^n e_i^2}$$

Where, e = the estimated error

3.7 Data Analysis Procedure

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, D-W test etc.

CHAPTER FOUR

ROLE OF PUBLIC DEBT IN UNDERDEVELOPED COUNTRIES

4.1 Introduction

Public debt plays a prominent role in underdeveloped countries like Nepal. Economic development is one of the main tasks of the government that helps to stimulate the growth of the economy with stability but due to lack of financial resources it cannot be achieved easily. In this context the role of taxation is emphasized but there is limited in taxation. This leads to the use of public borrowing as a method of resource mobilization. The public borrowing for financing productive investment generates additional productive capacity in the economy which would not have been possible in its absence.

Therefore, the selection of appropriate methods for financing development is important for the success of a development plan. Various methods are to be adopted for mobilizing financial resources and their implications for the economy are among the leading issues in economic development. Financial aspects are as important as the other aspects of economic development and their study should received attention (Gurle and Shaw, 1955; 515).

In the past, the way of living was very simple and borrowings were very small. The government also followed the policy of non-intervention in economic system. But in modern time, especially after the world depression of 1929/30, the public authorities gave started to take keen interest in economic development of their respective countries. Thus public borrowing has become 'sine-qua-non' for the economic development of nation (Lekhi, 1995; 365).

Thus underdeveloped countries like Nepal have low income whereby it is very difficult for mobilization of resources. Nepal has so vague areas where resources are abundant but those are not monetized. These sectors make the

mobilization of financial resources more complex. People have no incentives to save and also have no opportunities to save of such venue which is very high. The government policy to promote development is less effective. Thus the rigorous fiscal policy must be adopted to maximize domestic saving for required investment. The availability of capital funds can be increased through compulsory saving by the help of various fiscal instruments like borrowing, deficit financing and import restriction. There is no doubt public debt is one of the major sources for development financing in developing countries.

4.2 International Comparison of Public Debt Situation

The following table shows the Public Debt situation of fifteen countries in the world.

Rs. in Million

Countries	Revenue as a % of GDO	Expense as a % of GDP	Surplus or Deficit as a % of GDP	Total Debt as a % of GDP
Nepal	10.9	14.7	-1.6	50.3
India	12.7	15.1	-2.8	60.0
China	9.6	10.8	-1.6	-
Pakistan	13.5	15.3	-4.2	-
Afghanistan	7.4	17.1	-1.7	9.3
Sri Lanka	17.0	22.2	-7.2	93.0
Malaysia	23.7	20.1	-4.3	-
Myanmar	8.0	3.4	-1.8	50.3
Thailand	20.0	16.2	1.9	26.2
Philippines	16.2	17.5	-1.3	77.7
France	43.0	45.6	-4.1	67.4
Singapore	19.9	13.8	7.0	104.0
Canada	19.5	17.9	1.5	48.6
Germany	28.9	30.6	-1.4	43.5
United States	19.3	21.3	-2.0	46.9

Source: World Development Indicators, 2008.

In the above table shows the current government finances of SAARC, ASIAN and developed countries. The revenue of Nepal as a % of GDP is 10.9 million and expense 14.7 million and there is -1.6 million deficit. But in India the deficit ratio is greater than Nepal which is -2.8 million. But the total debt in India is greater than Nepal. Likewise in Pakistan the deficit is -4.2 million and -7.2 million in Sri Lanka. So, Nepal has fewer deficits than Afghanistan, India, Pakistan, Sri Lanka etc. But in China and Nepal there is same deficit. In Singapore there is greater surplus than other countries. Thailand and Canada are the countries which have surpluses. The greater deficit country is Sri Lanka and less deficit country is Philippines.

4.3 Public Borrowing and Mobilization of Resources

For economic development of underdeveloped countries borrowing from public can be another importance source for mobilizing the financial resources. No doubt, to uplift the economic development public borrowing has significant role. In terms of the orthodox theory of public finance, the current expenditure of government developed to producing capital expenditure the fruits of which subsequently be sold to purchase for fees, should be financed by loan. But Keynesian theory emphasized on demand generating aspects of public debt.

Mahesh Raj Joshi in his M.A. Dissertation entitled "Structure of Public Debt in Nepal" has observed that the system of public debt also has helped to mobilize the internal financial resources in the productive sector of country's economy. Borrowing for deficit financing is being advocated specially as a device for maintaining the circuit flow of money so as to promote full employment. For the temporary financing borrowing is one of the useful measures by applying short terms credit instruments (Joshi, 1982).

Mobilization of resources for financing ever increasing development outlay is an extremely difficult problem in developing economy. It is in the context that

the role of taxation is emphasized. But there is limit to taxation. If this limit is crossed taxation possesses a serious problem of economic incentives. This leads to the use of public borrowing as a method of resources mobilization (Singh, 2000; 368-374).

Nirajan Basnet in his M.A. thesis entitled "A Study of Public Debt in Nepal" has said that in modern era, to finance the excessive increased development expenditure, borrowing is an effective instrument for mobilization of resources which is less inflationary. Nobody wants to pay more tax unless he has to get more return. So increase in tax rate is against of public willingness. Taxation constitutes a method of forced saving; public borrowing is a device to utilize a substantial part of voluntary savings for financing the development plan of the public sectors. Public borrowing has certain advantage over taxation. Taxation, pushed beyond a certain limit has adversely affects economic incentives but public borrowing even though it evolves the withdrawal of resources by curtailing consumption just like taxes , does not produce an unfavorable reaction on incentives partly because of its voluntary nature and partly because of the exception of repayment (Basnet, 2003 ; 26).

4.4 Deficit Financing and Economic Development

Deficit financing in the context of Underdeveloped countries have different connotation. It is the most useful method of promoting economic development in Underdeveloped countries. The nature of an Underdeveloped country is such that sufficient private investment is not forthcoming due to various social, economic and institutional factors. Deficit financing may be used for the development of economic and social overheads such as construction of roads, railways, power projects, schools, hospital etc. By providing socially use full capital, deficit financing is able to break bottleneck and structure rigidities and thereby increases productivity. Deficit financing has been regarded as a means to cover the gap in financial resources for loan of adequate internal and external monetary sources in order to fulfill the physical targets in the plans (Nevin, 1963; 95).

The use of the deficit financing for economic development may be likened to fire which if unregulated produces havoc, while regulated it gives light and warmth. The danger is therefore not so much in the instrument itself as in the use to which it is put. Much depends on the degree of caution we exercise (Jhingan 1998; 371).

Deficit financing, in Nepalese context, has a crucial role in development plans. It has been regarded as a means to cover the gap in financial resources for need of adequate internal and external monetary sources to achieve the targets of different short term and long term plans (Dhakal, 2008; 26).

We can conclude that public borrowing is the means for to meet deficit financing of the economy. It has very close relation with borrowing both internal and external. Borrowing is easy source to finance deficit for economic development in both developed and underdeveloped countries.

4.5 Contribution of Public Debt in Economic Development

The role of public debt in an underdeveloped economy goes beyond financing government expenditure. Generally, government borrows for the creation of infrastructure in the economy. Since, it requires huge investment initially; this can not be met only through revenue collection. The aim of the public debt policy should be to help in strengthening the money and capital market, which in turn accelerate development and price stability.

Edward Nevin has observed on capital funds in underdeveloped countries as indeed a vital important role of public debt in underdeveloped territory is to secure funds not for the government itself, but in order to establish a regular and acceptable channel by which private investor may obtain access to funds which would otherwise have been lost to invest within that territory (Nevin, 1963; 95).

It is not merely that monetary action and debt management interact so that they ought to be one control. They are one and individual debt management lies at

the heart of monetary control and it is essential that this unity should be adequately reflected in our institutional arrangement. Thus debt management is an instrument of influencing the structure of interest rates through which desired impulse can be transmitted to the developed economy (The Radcliff Committee, 1959; 224).

Public debt plays an important part in the development of the capital stock as well. The growth of public debt helps the development of the money market and the capital market. Public debt hence plays a significant role in the economic development. The success of public borrowing depends upon the capacity to save in the economy and attractiveness of the government securities. Government securities have been recognized to be a very safe investment. An investor takes pride in his investment because he thinks that he has contributed to development of the country. Domestic resources are not sufficient to promote rapid development of the Nepal. An underdeveloped economy caught up in the vicious circle of poverty can achieve a real breakthrough only with the help of external capital. It is an accepted fact that economic development mostly be financed by domestic saving and that foreign aid only supplement domestic saving.

Due to the market imperfection and low saving capacity, mobilization of adequate financial resources is difficult in underdeveloped countries. However, further strengthening of the financial institutions of money and capital markets, government must facilitate by making appropriate policy measures. Then, only domestic resource mobilization will be strengthened which helps to finance for the process of economic development. Borrowing from the market may increase capital accumulation where borrowing from central bank may have inflationary pressure in the economy. Hence, it is desirable to increase market borrowing so as to increase the pace of economic development.

4.6 Public Debt Management in Three Year Interim Plan

Still there is a need for mobilization of external and internal debt and also foreign grants to bridge the gap between government revenues and the rising public expenditures required for socio-economic development. Budget deficit

goes unabated, as there is no match between availability of non-debt resources and the budget expenditures. As a result, on the one hand there is a necessity of controlling mobilization of loan in the public sector, reducing getting overdraft facility from the Nepal Rastra Bank (the Central Bank) and mobilizing domestic credit not above certain percent of the GDP and on the other hand, the requirements in fulfilling the covenants while utilizing the foreign loan has limited in inflow of foreign loans. Nevertheless, there is need of more foreign loans due to the low level of domestic savings, uncertainty in the current account balance and high requirement of capital goods for the mobilization of domestic resources and means.

) Problems and Challenges

It is obvious that the budget deficits so far are being met by the foreign and domestic loans. There is no denying the fact that there will be no alternative to external and internal loans, to meet the increasing expenditures for several years to come. Short-term loan liability heavily weighs in the outstanding internal loan as the one-year term treasury bills occupy 75 percent of it. As a result, interest rate risk looms large for the recurring issue of such bills. As for external loans, the foreign exchange risk can hardly be overlooked, as the external loan repayment liability amounts to 70 percent of the total loan repayment liability.

) Objective

Recognizing a proper balance between government revenue and expenditure is possible only when the utilization of both, external and internal debt is maximized. The objective of public debt management is to ensure sustainability, efficiency and effectiveness in order to meet the debt liability.

) Quantitative Targets

Total fiscal deficit in the plan period will be limited within 3 percent of the GDP. External and internal loans will be raised according. Net internal debt will not exceed 0.5 percent of the GDP.

) Policy and Working Policies

- Debt management will be made effective by updating the internal and

external records and computer technology will be used.

- An effective mechanism will be established in the National Planning Commission to monitor effective use of loans on a regular basis.
- The policy of not providing guarantee by government in general, to the public enterprises and other similar agencies for their loans will be continued.
- The policy of foreign exchange risk of capital investment made by the government in the public enterprises through foreign loans to be borne by the concerned enterprise will be continued with such amounts to be adjusted in the interest payment.

Source: Three Year Interim Plan (2007/08-2009/10).

CHAPTER FIVE

TREND AND STRUCTURE OF PUBLIC DEBT IN NEPAL

5.1 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 17th 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 1768 A.D. The Rana Prime Minister Chandra Shamshere had also borrowed money from Pashupati Nath temple to resettle the emancipated slaves 1925 A.D. Some occasional borrowings continued thereafter.

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 ‘fur-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 form 1963/64 and internal debt from FY 1964. For the first time FY 1963/64, the government flatted 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.

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. Since Nepal lacks the sufficient internal resources for the economic development. The huge amount of debt is inevitable. The debt proportion of the budgeting is to be relied upon the GDP of the nation. It is hence necessary to maintain the internal debt with in the limit of 2 percentage of GDP.

5.2 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. 5.1 Different Scenario of Resource Gap (1985/86 – 2006/07)

Rs. in Million

FY	Government Revenue	Annual Growth rate of Government 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
1985/86	4644.5	-	9797.1	-	5152.6	53215.0	8.7	18.4	9.7
1986/87	5974.1	28.6	11513.2	17.5	5538.1	61140.0	9.8	18.9	9.1
1987/88	7350.4	23.0	14105.0	22.5	6754.6	73170.0	10.1	19.3	9.2
1988/89	7776.9	5.8	18005.0	27.6	10228.1	85831.0	9.1	21.0	11.9
1989/90	9287.5	19.4	19669.3	9.2	10381.8	99702.0	9.3	19.7	10.4
1990/91	10729.7	15.5	23549.8	19.7	12879.9	116127.0	9.2	20.3	11.1
1991/92	13512.7	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
1999/00	42893.8	15.1	66272.5	11.2	23378.7	366251.0	11.7	18.1	6.4
000/01	48893.6	14.0	79835.1	20.5	30941.5	394052.0	12.4	20.3	7.9
001/02	50445.5	3.2	80072.2	0.3	29626.7	425454.0	11.9	18.8	7.0
002/03	56229.8	11.5	84006.1	4.9	27776.3	444052.0	12.7	18.9	6.3
003/04	62331.0	10.9	89442.6	6.5	27111.6	473545.0	13.2	18.9	5.7
004/05	70122.7	12.5	102560.4	14.7	32437.7	517993.0	13.5	19.8	6.3
005/06	72282.1	3.1	110889.2	8.1	38607.1	630300.5	11.5	17.6	6.1
0006/07	87712.1	21.3	133604.6	20.5	45892.5	696989.0	12.6	19.2	6.6

Average Annual Growth Rate	-	14.5	-	12.8	-	-	11.0	19.0	8.0
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In the above Table 5.1 second column and third 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. 9797.1million in FY 1985/86 has gone up to Rs. 133604.6 million in 2006/07; where as total revenue has increased from 4644.5 million in FY 1985/86 to Rs. 87712.1 in FY 2006/07. This shows the public expenditure has dominated to government revenue. Thus, the revenue-expenditure gap is Rs. 5152.6 million in FY 1985/86. The expenditure gap is continuously increasing each fiscal year. In FY 2006/07 the gap has been Rs. 45892.5 million. This indicates that the resource gap is serious problem in Nepal.

In the FY 2006/07 the growth rate of total expenditure has been 10.8 percent per annual where as annual growth rate of total revenue has been 12.6 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 FY1985/86 to FY 2006/07. GDP is the main indicator of the economic development that is why analysis of resource gap as percentage of GDP is more important. We can the revenue expenditure gap has been decreased from 9.7 percent in FY 1991/92 to 6.6 percent in FY2006/07. Average annual growth rate of revenue expenditure gap as percentage of GDP is 8.0 percent. We can show the different scenario of Resource Gap in Nepal in the following figure.

Figure 5.1 Different Scenario of Resource Gap in Nepal

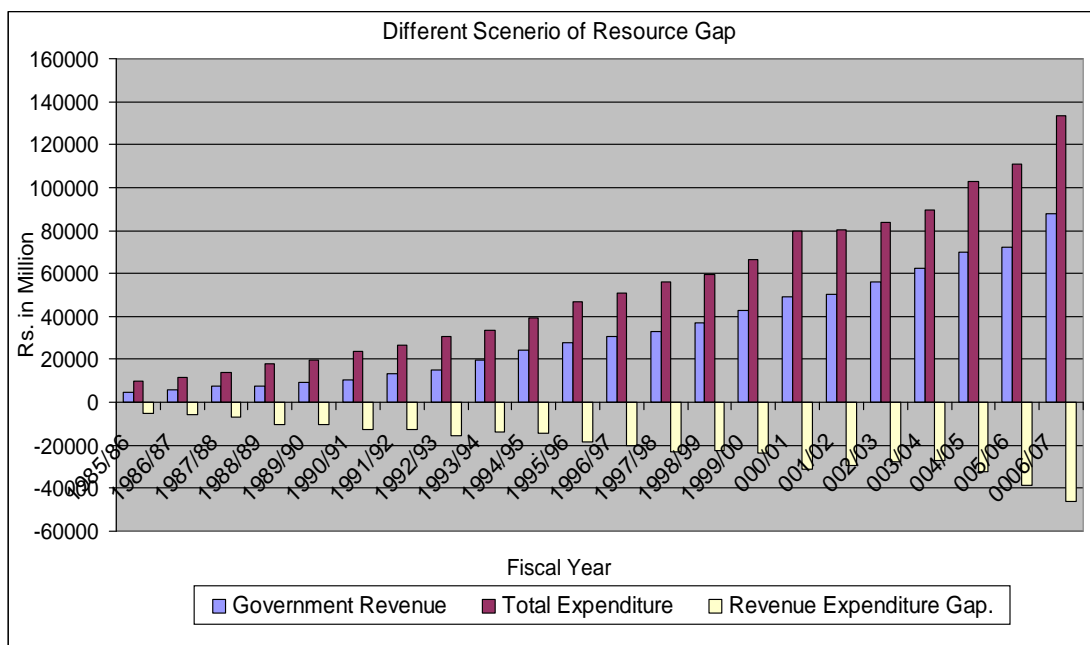


Figure 5.1 shows different scenario of resource gap. It shows that both revenue and expenditure are increasing year by year but the increasing rate of expenditure is higher than revenue. So, the gap between revenue and expenditure is very high in every fiscal year.

5.3 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 5.2.

Table 5.2 Trends in Government Debt and Annual Growth Rate

Rs. in Million

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
1985/86	1403.4	2501.1	3909.5	35.9	64.0	53215	2.63	5.98	7.35
1986/87	1644.7	2705.8	4350.5	37.8	62.2	61140	2.69	5.39	7.12
1987/88	1130.0	3815.8	4945.8	22.8	77.2	73170	1.54	4.71	6.76
1988/89	1330.0	5666.4	6996.4	19.0	81.0	85831	1.54	4.19	8.15
1989/90	2150.0	5959.4	8709.6	24.7	68.4	99702	2.15	4.78	8.74
1990/91	4552.7	6256.7	10809.4	42.1	57.9	116127	3.90	3.48	9.31
1991/92	2078.8	6816.9	8895.7	23.4	76.6	144933	1.43	4.70	6.14
1992/93	1620.0	6920.9	8540.9	19.0	81.0	165350	0.98	4.19	5.17
1993/94	1820.8	9163.6	10984.4	16.6	83.4	191596	0.95	4.78	5.73
1994/95	1900.0	7312.3	9212.3	20.6	79.4	209976	0.90	3.48	4.39
1995/96	2200.0	9463.9	11663.9	18.9	81.1	239388	0.92	3.95	4.87
1996/97	3000.0	9043.6	12043.6	24.9	75.1	269570	1.11	3.35	4.47
1997/98	3400.0	11054.4	14454.4	23.5	76.5	289798	1.17	3.81	4.99
1998/99	4710.0	11852.4	16562.4	28.4	71.6	330018	1.43	3.59	5.02
1999/00	5500.0	11812.2	17312.2	31.8	68.2	366251	1.50	3.23	4.73
2000/01	7000.0	12044.0	19044.0	36.8	63.2	394052	1.78	3.06	4.83
2001/02	8000.0	7698.7	15698.7	51.0	49.0	425454	1.88	1.81	3.69
2002/03	8880.0	4546.4	13426.4	66.1	33.9	444052	2.00	1.02	3.02
2003/04	5607.0	7629.0	13236.0	42.4	57.6	473545	1.18	1.61	2.80
2004/05	8938.1	9266.0	18204.1	49.1	50.9	517993	1.73	1.79	3.51
2005/06	11834.2	8214.4	20048.6	59.0	41.0	630300	1.88	1.30	3.18
2006/07	17892.3	10053.5	27945.8	64.0	36.0	696989	2.57	1.44	4.01
Average Annual Growth	-	-	-	34.4	65.2	-	1.7	3.4	5.1

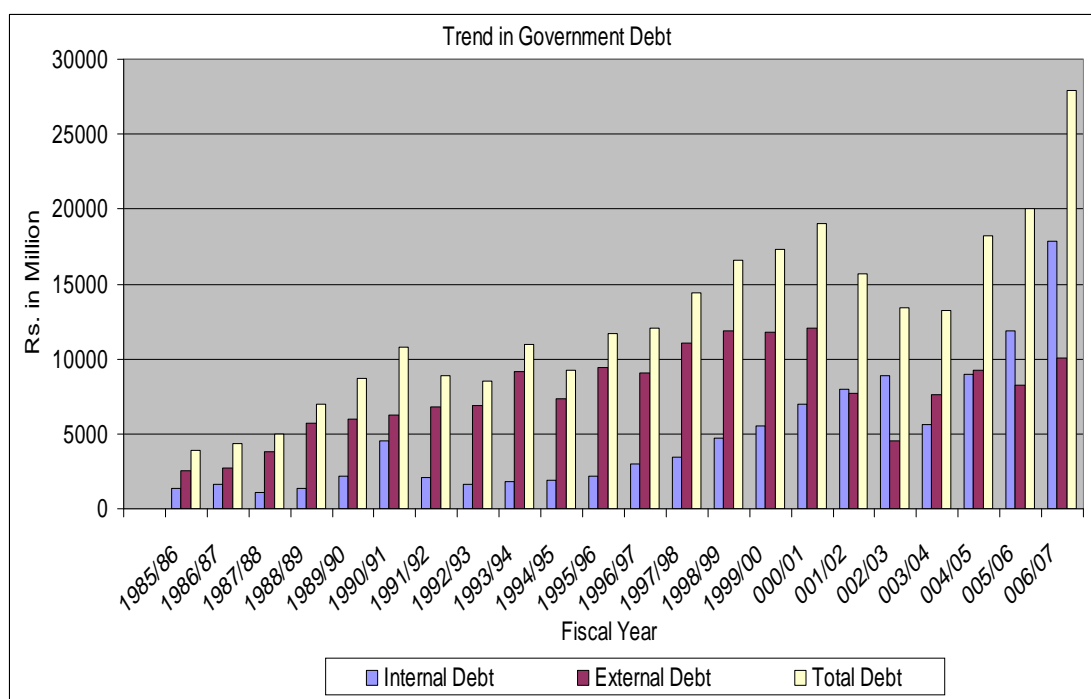
Source: Various Issues of Economic Survey, MOF

Table 5.2 shows that the government borrowing and annual growth rate from the period 1985/86 to 2006/07. 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 34.4 and 65.2 respectively. The above table shows that the total debt has been increased from Rs.3909.5 million in FY 1985/86 to Rs. 27945.8 million in FY 2006/07.

The share of internal debt and external debt as percentage of GDP is 2.63 percent and 5.98 percent respectively in FY 1985/86. This has been decreased to 2.57 percent and 1.44 percent respectively in FY 2006/07 but this has been increased than last year. The contribution of external debt to total has been decreased from 41.0 in last year to 36.0 percent in the study period. This decreasing trend of external debt is caused due to the political instability, insurgency and terrorism.

Figure 5.2 Trends in Government Debt in Nepal



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.

5.4 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 5.3.

Table 5.3 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

1985/86	3080.0	2290.0	1500.0	320.2	7190.2	42.8	31.8	20.8	4.6
1986/87	3440.0	2990.0	1940.0	627.4	8997.4	38.2	33.2	21.6	7.0
1987/88	4090.0	4651.7	2196.5	697.8	11636.0	35.1	40.0	18.9	6.0
1988/89	1171.0	5088.6	2196.5	4431.8	12887.9	9.1	39.5	17.0	34.4
1989/90	1821.0	5388.6	2896.5	4567.0	14673.1	12.4	36.7	19.7	31.2
1990/91	2351.0	5482.3	3646.5	9376.1	20854.9	11.3	26.3	17.5	44.9
1991/92	3483.2	5132.2	4546.3	10073.2	23234.9	15.0	22.1	19.6	43.4
1992/93	4403.2	5132.2	4901.5	11019.2	25456.1	17.3	20.2	19.3	39.6
1993/94	5216.3	4732.2	5691.5	14991.2	30631.2	17.0	15.4	18.6	36.0
1994/95	6392.5	4122.2	6067.4	15466.7	32048.8	19.9	12.9	18.9	46.8
1995/96	7142.5	3672.2	7376.5	16050.7	34241.9	20.9	10.7	21.5	45.2
1996/97	8092.5	3042.2	8736.5	16019.7	35890.9	22.5	8.5	24.3	44.7
1997/98	9182.5	3302.2	9886.4	16035.6	38406.7	23.9	8.6	25.7	41.7
1998/99	17586.9	3302.2	10426.4	17784.1	49099.6	35.8	6.7	21.2	32.7
1999/00	21027.0	4262.0	11526.5	17541.3	54356.8	38.7	7.8	21.2	32.7
2000/01	27610.8	5962.2	12476.4	13994.2	60043.6	46.0	9.9	20.8	29.2
2001/02	41106.5	11090.7	11536.1	9259.3	72992.6	56.3	15.2	15.8	19.2
2002/03	48860.7	16059.2	9629.8	9164.5	83714.2	58.4	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	7225.7	102365	72.7	18.7	1.5	8.1
Average	-	-	-	-	-	35.4	20.3	17.2	26.7
Annual Growth Rate									

Source: Economic Survey

The table 5.3 shows the pattern of internal net outstanding debt in Nepal during the period 1985/86 to 2006/07, 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 35.4 percent which is larger than others.

The share of Treasury bills, development binds, National saving certificates and Special bonds to total net outstanding debt is Rs. 3080.0 million, Rs. 2290.0 million, Rs. 1500.0 million and Rs. 320.0 million respectively in FY 1985/86. In the FY 2006/07 it has been increased to Rs. 74445.3 million, Rs. 19177.1 million, Rs. 1516.9 million and Rs. 7225.7 million respectively.

The percentage share of treasury bills, development bonds, national saving and special bonds are 72.7 percent, 18.7 percent, 1.5 percent and 8.1 percent, respectively. 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 35.4 percent, 20.3 percent, 17.2 percent and 26.7 percent respectively. The contribution of treasury bills is larger than others because its average annual growth rate is 39.38 percent.

Figure 5.3 Pattern of Internal Outstanding Debt in Nepal.

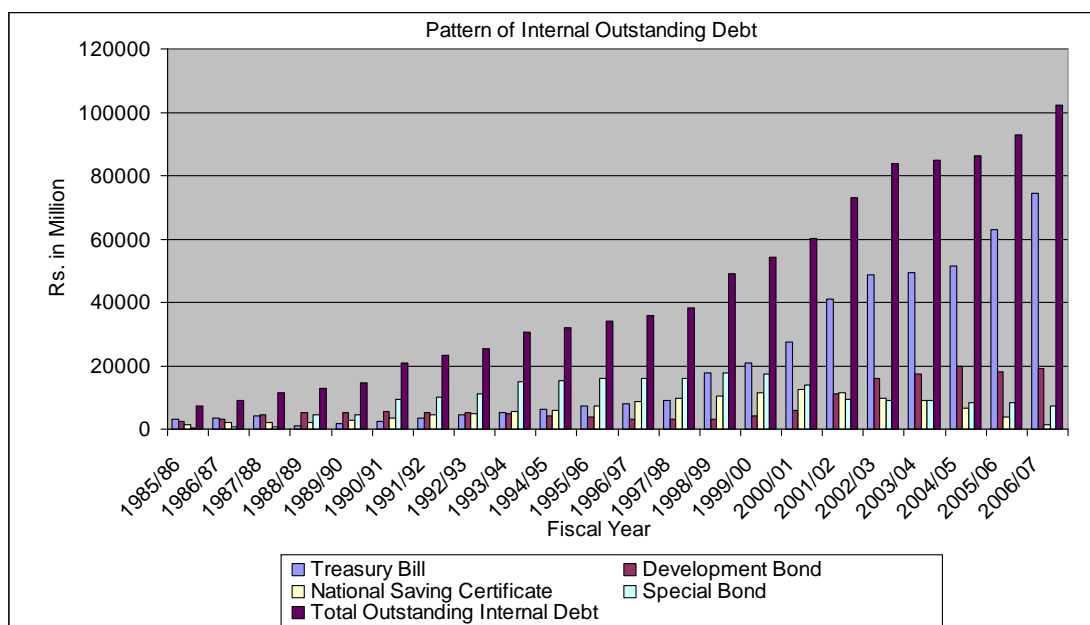


Figure 5.3 shows that the pattern of internal outstanding debt where the portion of treasury bills and development bond are monotonically increasing but national saving certificates and special bonds are increasing in initial year but they are decreasing last few year.

5.5 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 5.4 pattern of External Debt in terms of Disbursement by Major Sources

Rs. in Million

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
1985/86	498.9	1872.0	2370.9	21.0	79.0	53215	0.94	3.52	4.46
1986/87	299.7	2062.2	2236.1	12.7	87.3	61140	0.49	3.37	3.66
1987/88	462.5	2631.8	3094.3	14.9	85.1	73170	0.63	3.60	4.23
1988/89	507.8	3680.9	4188.7	12.1	87.9	85831	0.59	4.29	4.88
1989/90	1000.6	3627.7	4628.3	21.6	78.4	99702	1.00	3.64	4.64
1990/91	1602.8	2757.2	4360	36.8	63.2	116127	1.38	2.37	3.75
1991/92	2389.8	3879.6	6269.4	38.1	61.9	144933	1.65	2.68	4.33
1992/93	1307.6	4654.1	5961.7	21.9	78.1	165350	0.79	2.81	3.61
1993/94	582.9	8580.7	9163.6	6.4	93.6	191596	0.3	4.48	4.78
1994/95	717.3	6595	7312.3	9.8	90.2	209976	0.34	3.14	3.48
1995/96	460.0	9003.9	9463.9	4.9	95.1	239388	0.19	3.76	3.95
1996/97	850.7	8192.9	9043.6	9.4	90.6	269570	0.32	3.04	3.35
1997/98	1314.5	9740	11054.5	11.9	88.1	289798	0.45	3.36	3.81
1998/99	584	11268.4	11852.4	4.9	95.1	330018	0.18	3.41	3.59
1999/00	757.9	11054.3	11812.2	6.4	93.6	366251	0.21	3.02	3.23
2000/01	586.7	11457.3	12044	4.9	95.1	394052	0.15	2.91	3.06
2001/02	87	7611.6	7698.6	1.1	98.9	425454	0.02	1.79	1.81
2002/03	657.2	3889.2	4546.4	14.5	85.5	444052	0.15	0.88	1.02
2003/04	66	7563	7629	0.9	99.1	473545	0.01	1.6	1.61
2004/05	126.5	9139.6	9266.1	1.4	98.6	517993	0.02	1.76	1.79
2005/06	40.6	8173.7	8214.3	0.5	99.5	630300.5	0.01	1.3	1.3
2006/07	9004.6	1048.9	10053.5	89.6	10.4	696989	1.29	0.15	1.44
Average Annual Growth Rate	-	-	-	15.7	84.3	-	0.5	2.8	3.3

Source: Economic Survey

Table 5.4 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. 2370.9 million in FY1985/86 which is increased to Rs. 10053.5 million in FY 2006/07. In FY 1985/86, Rs. 498.9 million from bilateral source and Rs. 1872.0 million from multilateral source were collected where the share is 21.0 percent and 79.0 percent respectively. In FY 2006/07, the bilateral loan has been increasing to Rs. 9004.6 million and multilateral loan has been decreasing to Rs. 1048.9 million where the share is 89.6 percent and 10.4 percent respectively. The average annual growth rate as percentage share of bilateral and multilateral Sources is 15.7 percent and 84.3 percent respectively.

The ratio of bilateral source to GDP is 0.94 percent in FY1985/86, which is increased to 1.29 percent in FY 2006/07. Similarly, the multilateral source to GDP ratio is 3.52 percent in FY1985/86 which is also decreased to 0.15 percent in FY 2006/07. 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 0.5 percent and average annual growth rate of multilateral sources as percentage of GDP ratio is 2.8 percent. Hence the annual average growth rate of total external debt as percentage of GDP is 3.3 percent.

Figure 5.4 Pattern of External Debt in Terms of Disbursement by Major Sources

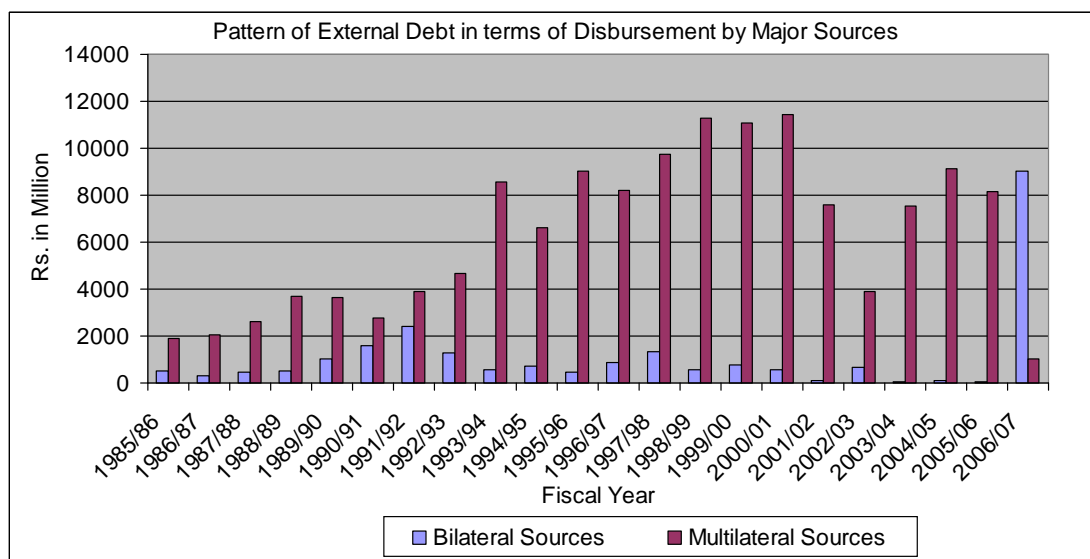


Figure 5.4 shows the trends of bilateral and multilateral sources of external debt where the portion of multilateral sources is very higher than bilateral sources which shows that multilateral sources is more important.

5.6 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. 5.5 Net Outstanding Public Debt to GDP Ratio

Rs. in Million

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
1985/86	6031.6	10330.2	16361.8	53215	11.3	19.4	30.7
1986/87	7190.2	15171.9	22362.1	61140	11.8	24.8	36.6
1987/88	8997.4	20826	29823.4	73170	12.3	28.5	40.8
1988/89	11636	29216.9	40852.9	85831	13.6	34.0	47.6
1989/90	12887.9	36800.9	49688.8	99702	12.9	36.9	49.8
1990/91	14673.1	59505.3	74178.4	116127	12.6	51.2	63.9
1991/92	20855.9	70923.9	91779.8	144933	14.4	48.9	63.3
1992/93	23234.9	87420.8	110655.7	165350	14.1	52.9	66.9
1993/94	25456.1	101966.8	127422.9	191596	13.3	53.2	66.5
1994/95	30631.2	113000.9	143632.1	209976	14.6	53.8	68.4
1995/96	32057.8	128044.4	160102.2	239388	13.4	53.5	66.9
1996/97	34241.9	132086.8	166328.7	269570	12.7	49.0	61.7
1997/98	35890.9	161208	197098.9	289798	12.4	55.6	68.0
1998/99	38406.7	169465.9	207872.6	330018	11.6	51.4	63.0
1999/00	49669.6	190691.2	240360.8	366251	13.6	52.1	65.6
2000/01	54357	200404.4	255907.6	394052	13.8	50.9	64.9
2001/02	60043.7	220125.6	280169.3	425454	14.1	51.7	65.9
2002/03	73620.7	223433.2	297053.9	444052	16.6	50.3	66.9
2003/04	84645.3	232779.3	317424.6	473545	17.9	49.2	67.0
2004/05	86133.7	219641.9	305775.6	517993	16.6	42.4	59.0
2005/06	87564.2	233968.6	321532.8	6303005	13.9	37.1	51.0
2006/07	93031.9	216200.7	309232.6	696989	13.3	31.0	44.4
Annual Average growth rate	-	-	-	-	13.7	44.4	58.1

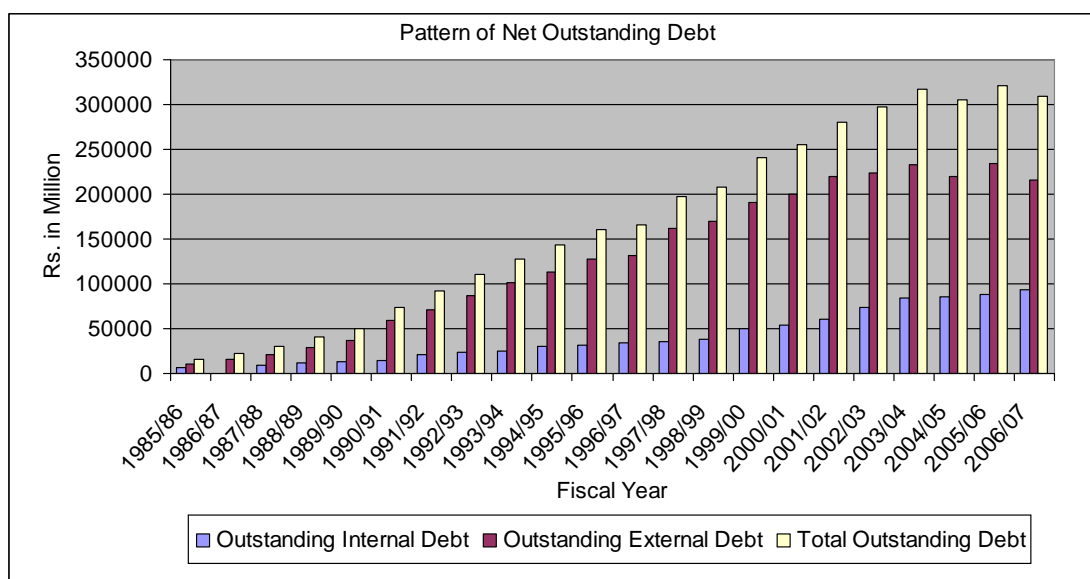
Source: Various Issues of Economic Survey, MOF

Table 5.5 shows that the net outstanding public debt. Both net outstanding

internal and external public debt are monotonically increasing in each fiscal year. In FY 1985/86, net outstanding internal and external debt is Rs. 6031.6 million and Rs.10330.2 million respectively. In FY 2006/07, net outstanding internal and external debt has been increased to Rs. 93031.9 million and Rs. 216200.7 million respectively.

The average annual growth rates of internal and external debt as percentage of GDP are 13.7 percent and 44.4 percent respectively. And average annual growth rate of total public debt as percentage of GDP is 51.1 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 5.5 Pattern of Net Outstanding Debt in Nepal



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.

5.7 Public Debt as Percentage of Fiscal Deficit

In fiscal system of Nepal, the fiscal deficit is financed through both internal and external borrowing. Since the government expenditure is rapidly increasing which is unable to raise revenue accordingly. Thus, accumulation of debt is mainly for financing the deficit. The internal and external debt as percentage of fiscal deficit has shown in the following table.

Table No. 5.6 Percentage of Debt in Fiscal Deficit

Rs. in Million

FY	Internal Debt	External Debt	Total debt	Fiscal Deficit	Foreign Grants	Annual Growth rate of Deficit	ID as % of Deficit	ED as % of Deficit
1985/86	1403.4	2501.1	3904.5	3979.7	1172.9	-	35.3	62.8
1986/87	1644.7	2705.8	4350.5	4253	1285.1	6.9	38.7	63.6
1987/88	1130	3815.8	4945.8	4677.8	2076.8	10.0	24.2	81.6
1988/89	1330	5666.4	6996.4	8547.5	1780.6	82.7	15.6	66.3
1989/90	2150	5959.6	8109.6	8406.4	1975.4	-1.7	25.6	70.9
1990/91	4552.7	6256.7	10809.4	10655.1	2164.8	26.7	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	6920.9	8540.9	11950	3793.3	22	10.3	43.9
1993/94	1820.8	9163.6	10984.4	11623	2393.6	-11	13	65.4
1994/95	1900	7312.3	9212.3	10547.7	3937.1	3.3	13.1	50.5
1995/96	2200	9463.9	11663.9	13824.2	4825.1	28.8	11.8	50.7
1996/97	3000	9043.6	12043.6	14361.9	3988.3	9.1	14.7	44.4
1997/98	3400	11054.4	14454.4	17777.8	5402.6	13.9	14.7	47.7
1998/99	4710	11852.4	16562.4	17991.4	4336.6	-3.7	21.1	53.1
1999/00	5500	11812.2	17312.2	17667	5711.7	4.7	23.5	50.5
2000/01	7000	12044	19044	24188.1	6753.4	32.3	22.6	38.9
2001/02	8000	7698.7	15698.7	22940.6	6686.2	-4.2	27	26
2002/03	8880	4546.4	13426.4	16437.1	11339.1	-6.2	32	16.4
2003/04	5607	7629	13236	15828.2	11283.4	-2.4	20.7	28.1
2004/05	8938.1	9266	18204.1	18046.5	14391.2	19.6	27.6	28.6
2005/06	11834.2	8214.4	20048.6	24779.6	13827.5	19	30.7	21.3
2006/07	17892.3	10053.5	27945.8	30091.7	15800.8	18.9	39	21.9
Average Annual Growth Rate	-	-	-	-	-	9.0	21.1	40.0

Source: Various Issues of Economic Survey, MOF

The table depicts the raising of total public debt. Total debt in FY 1985/86 is Rs. 3904.5 million which has been increased to Rs.27945.8 million in FY

2006/07. In FY 2006/07 both internal and external debt are increased to Rs.17892.3 million and Rs.10053.5 million respectively. The deficit has been also increased to Rs. 30091.7 million. The average annual growth rate as percentage of total debt to fiscal deficit is 9.0 percentage.

The internal debt had occupied 35.3 percent of deficit where as external debt had occupied 62.8 percent in FY 1985/86 and in FY 2006/07 the internal debt has occupied 39.0 percent where as external debt has occupied 21.9 percent. The scenario indicates that the government's growing reliance on external loan for meeting the ever increasing fiscal deficit.

Figure No: 5.6 Pattern of public Debt and Fiscal Deficit

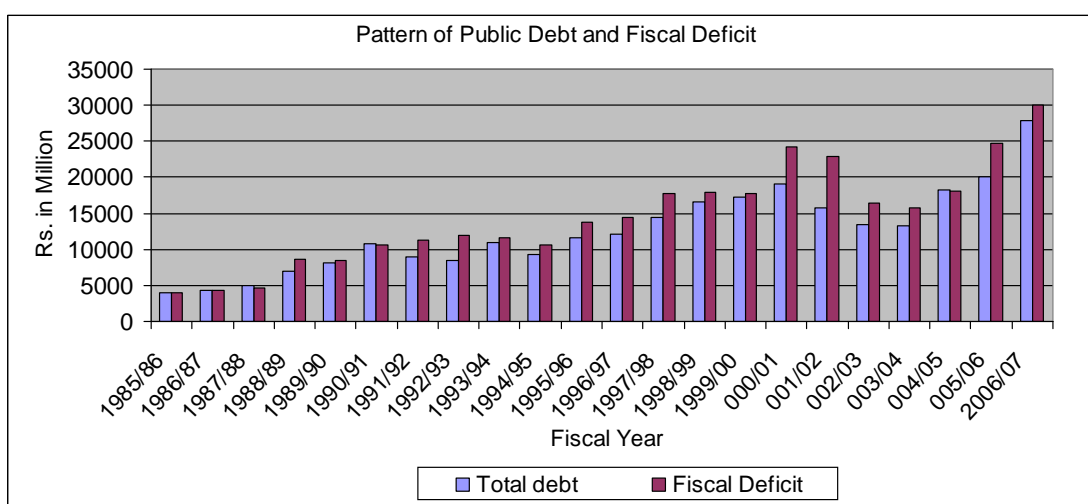


Figure 5.6 shows the trend pattern of public debt and fiscal deficit. Both are in increasing trend. When total debt increases fiscal deficit also increases.

5.8 Share of External and Internal Debt Servicing as Percentage of GDP

Debt servicing of foreign loan entails double burden. First, debt servicing has the primary claim upon the allocation of national budget. To that extent priority for economic activities such as 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 5.7 shows the ratio of internal and external debt servicing to total debt servicing and their percentage share to GDP during the period 1985/86 to 2006/07.

Table No. 5.7 Internal and External Debt Servicing in Nepal
Rs. In Million

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
1985/86	733.6	286.0	1019.6	53215	1.4	0.5	1.9
1986/87	709.6	487.0	1196.6	61140	1.2	0.8	2.0
1987/88	905.5	591.0	1441.6	73170	1.2	0.8	2.0
1988/89	1019.4	701.3	1720.6	85831	1.2	0.8	2.0
1989/90	1155.6	1123.6	2279.2	99702	1.2	1.1	2.3
1990/91	1320.9	1086.5	2407.4	116127	1.1	0.9	2.1
1991/92	2132.2	1664.9	3797.1	144933	1.5	1.1	2.6
1992/93	2428.6	2131.9	4560.5	165350	1.5	1.3	2.8
1993/94	2397.1	2488.7	4885.8	191596	1.3	1.3	2.6
1994/95	3098.6	2984.7	6083.3	209976	1.5	1.4	2.9
1995/96	3411.0	3304.3	6715.3	239388	1.4	1.4	2.8
1996/97	4177.5	3349.4	7526.9	269570	1.5	1.2	2.8
1997/98	3481.6	4201.2	7682.8	289798	1.2	1.4	2.7
1998/99	3977.5	4745.5	8723.0	330018	1.2	1.4	2.6
1999/00	4712.5	5321.4	10033.9	366251	1.3	1.5	2.7
2000/01	4193.2	6201.4	10394.6	394052	1.1	1.6	2.6
2001/02	5637.8	6567.5	12205.3	425454	1.3	1.5	2.9
2002/03	8663.4	7519.2	16182.6	444052	2	1.7	3.6
2003/04	9429.9	7908.9	17338.8	473545	2	1.7	3.7
2004/05	11651.4	8099.9	19751.3	517993	2.3	1.6	3.8
2005/06	11272.7	9150.8	20423.5	630300	1.8	1.5	3.3
2006/07	13321.8	9594.5	22916.3	696989	1.9	1.4	3.3
Average Annual Growth Rate	-	-	-	-	1.5	1.3	2.7

Source: Various Issues of Economic Survey, MOF

Table 5.7 shows that the total debt servicing is increasing rapidly. In the FY 1985/86, total debt servicing was Rs. 1019.6 million which has increased to Rs.22916.3 million in FY 2006/07.

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 1.3 and total debt servicing as percentage of GDP is 2.7 percent in FY 2006/07. 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 5.7: Pattern of Internal and External Debt Servicing

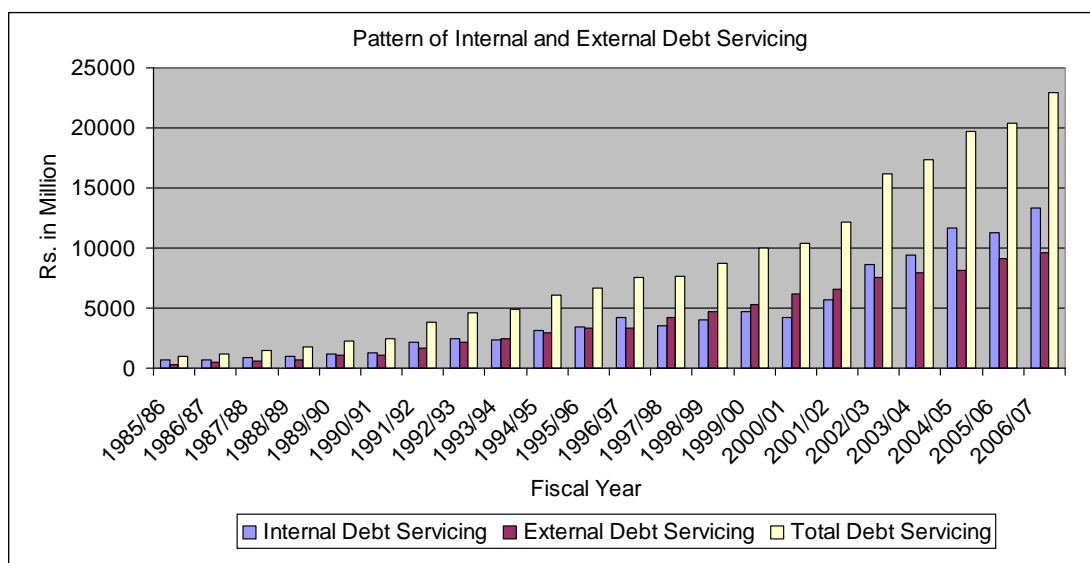


Figure 5.6 shows the internal debt, external debt and total debt servicing in Nepal. This shows both internal and external debt servicing are increasing in each fiscal year.

5.9 Trend of Regular Expenditure and Debt Servicing

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

Table 5.8 Regular Expenditure and Debt Servicing

Rs. in Million

Fiscal Year	Regular Expenditure (R.E.)	Annual growth rate of R.E.	Total Debt Servicing	External Debt Servicing	Total Debt Servicing as % of R.E.	External Debt Servicing as % of R.E.
1985/86	3584.0	-	1019.3	286.0	28.4	8.0
1986/87	4135.2	15.4	1196.6	487.0	28.9	11.8
1987/88	4677.0	13.1	1441.6	591.0	30.8	8.0
1988/89	5676.2	21.3	1720.6	701.3	30.3	11.8
1989/90	6671.8	17.5	2279.2	1123.6	34.2	12.6
1990/91	7570.3	13.5	2407.4	1086.5	31.8	12.4
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
1999/00	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	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
Average annual Growth rate	-	15.4	-	-	30.4	13.8

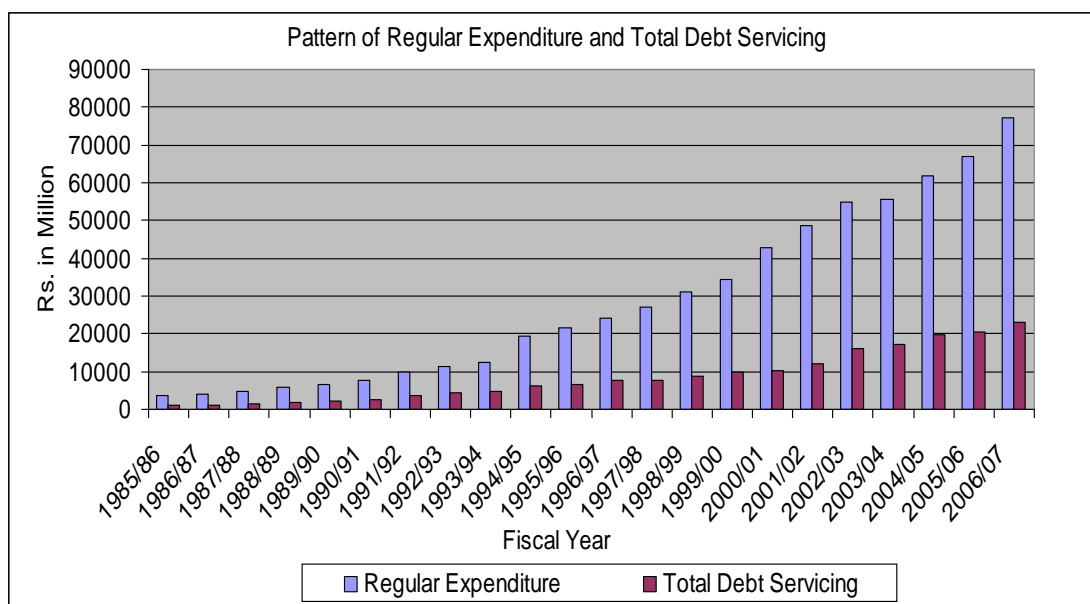
Source: Various Issues of Economic Survey, MOF

In the year 1985/86 total debt servicing was Rs.1019.3 million, which was 28.4 percentage of regular expenditure of that year. Total debt servicing was decreased and reached 23.1 percentage of regular expenditure in the FY 2005/06. But in FY 2006/07 total debt servicing as a percentage of regular expenditure is increased to 29.7 percent. The average annual growth rate of regular expenditure is 15.4 percent and average annual growth rate of external

debt servicing as percentage of regular expenditure is 13.8 percent in the FY 2006/07. The average annual growth rate of regular expenditure is less than average annual growth rate of external debt servicing as percentage of regular expenditure.

On the other hand, the external debt servicing was Rs. 286.0 million in the FY 1985/86 which is 8.0 percent of regular expenditure. The portion of external debt servicing in average in total regular expenditure become 14.9 percent in the study period. This growth of debt servicing shows the dangerous symptoms for country's economy.

Figure 5.8 Patterns of Regular Expenditure and Debt Servicing



The figure 5.8 shows the pattern of Regular Expenditure and Total debt servicing. The regular expenditure is higher than total debt servicing in each fiscal year.

5.10 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.

Table5.9 Share of Foreign Aid in Development Expenses in Economic Plans

Rs. in million

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
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. 5.9 Pattern of Development Expenditure and Foreign Aid

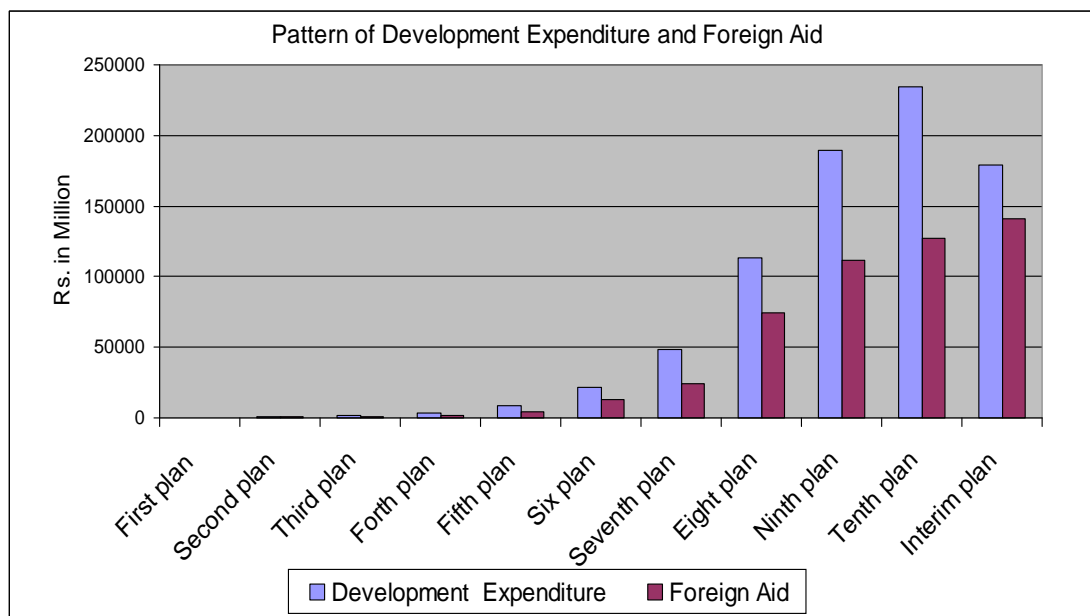


Figure 5.9 shows the pattern of Development expenditure and Foreign Aid. Development expenditure is higher than Foreign Aid in each plan period.

5.11 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 5.2 shows the trends of average annual growth rate of internal debt is 34.4 percent of Total Debt, but external debt is 65.2 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 58.1 percent of GDP (Table 5.5) in the one hand, and the average annual growth rate of total debt servicing to GDP ratio is nearly 2.7 percent (Table 5.7). 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 30.4 percent and only external debt servicing is 13.8 percent (Table 5.8). 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.

CHAPTER SIX

EMPIRICAL ANALYSIS

6.1 Impact of Public Debt on Economic Development of Nepal

To study the impact 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 impact of external and internal debt on the economic development of Nepal. Regression equation in this chapter is conducted by using SPSS programme.

6.1.1 Effects of Internal Debt on GDP

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

$$Y = a_0 + a_1 X_1$$

Where, Y = GDP (Dependent Variable)

X_1 = Internal Debt (Independent Variable)

a_0, a_1 = Regression parameters

The result of this regression model is:

$$Y = 86959.6 + 40.9 X_1$$

(3.367) (10.075)

F-test = 101.51 D-W $\bar{R}^2 = 0.82$ $R^2 = 0.835$ $a_0 = 86959.6$ $a_1 = 40.9$
test = 0.79

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 intercept term (a_0) is 86959.6 which indicate that Y would be 86959.6 if the independent variable X_1 is zero. The result shows that MPC of Internal Debt is 40.9, which explain that one unit increases in Internal Debt (X_1) causes GDP (Y) would increase by 40.9 units. The coefficient of determination R^2 is 0.83 which means that 83 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 83 percent of it. This means that 17 percent of the variation in GDP cannot be explained by Internal Debt alone. Therefore, there must be other variables that have an influence also. Adjusted value of R^2 is 0.82 which means 82 percent of Internal Debt is influenced by GDP. Similarly, the calculated F-value is 101.51 at 5 percent level of significance which is greater than tabulated F-value 4.35 which implies that the model is statistically very significant. To test the significance of regression coefficient, the t- test is used with at a certain level of significance at n-1 degree of freedom. Since the calculated t value of a_0 (86959.6) is greater than tabulated value 2.080 so it is statistically significant. However the calculated t value of a_1 (40.9) is greater than tabulated value so they are statistically significance. The D-W test (d) is 0.79 at 5 percent level of significance we can find the tabulated value of $d_1 = 0.914$ and $d_u = 1.284$. Thus, $0 < 0.79 < 0.914$ or $0 < d < d_1$. So there exist no positive autocorrelation or the study is statistically significant.

6.1.2 Effects of External Debt on GDP

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

$$Y = a_0 + a_1 X_2$$

The result of this regression model is:

$$Y = 2583.5 + 36.6 X_2$$

(0.025) (2.936)

D- F-test = 8.62 $\bar{R}^2 = 0.26$ $R^2 = 0.30$ $a_1 = 36.6$ $a_0 = 2583.5$

W test = 0.208

Where, Y = GDP (Dependent Variable)

X_2 = External Debt (Independent Variable)

a_0, a_1 = Regression parameters

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 External Debt increases than GDP increases. The intercept term (a_0) is 2583.5 which indicate that GDP (Y) would be 2583.5 if the independent variable X_2 is zero. The result shows that MPC of External Debt is 36.6, which explain that one unit increases in External Debt (X_2) causes GDP (Y) would increase by 36.6 units. The coefficient of determination R^2 is 0.30 which means that 30 percent of variation of GDP (Y) is determined by the explanatory variables i.e. External 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 External Debt can explain 30 percent of it. This means that 70 percent of the variation in GDP cannot be explained by External Debt alone. Therefore, there must be other variables that have an influence also. Adjusted value of R^2 is 0.26 which means 26 percent of External Debt is influenced by GDP. Similarly, the calculated F-value is 8.62 at 5 percent level of significant which is greater than tabulated F-value 4.35 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. Since the calculated t value of a_0 (2583.5) is greater than tabulated value 2.080 at 5 level of significance so it is statistically significant. However the calculated t value of a_1 (36.6) is greater than tabulated value so they are statistically significance. The D-W test (d) is 0.208 at 5 percent level of significance. We can find the tabulated value of $d_1 = 0.914$ and $d_u = 1.284$. Thus, $0 < 0.208 < 0.914$ or $0 < d < d_1$. So there exist no positive autocorrelation or the study is statistically significant.

6.1.3 Effects of Internal Debt and External Debt on GDP

This analysis shows that relationship between GDP with internal and external debt. The impact of internal debt and external debt can be shown by following regression equation Y on X_1 and X_2 which is:

$$Y = a_0 + a_1 X_1 + a_2 X_2$$

The result of this regression model is:

$$Y = -23614.4 + 36.9 X_1 + 16.9 X_2$$

$$(-0.569) \quad (10.144) \quad (3.116)$$

$$F\text{-test} = 8.62 \quad \bar{R}^2 = 0.80 \quad R^2 = 0.89 \quad a_1 = 36.9 \quad a_2 = 16.9 \quad a_0 = -23614.4$$

$$D\text{-W test} = 1.09$$

Where, Y = GDP (Dependent Variable)

X_1 = Internal Debt (Independent Variable)

X_2 = External Debt (Independent Variable)

a_0, a_1, a_2 = Regression parameters

Interpretation of the result:

The fitted equation above shows that there is positive relationship between GDP (Y) and Internal Debt (X_1) and External Debt which means when Internal Debt and External Debt increase than GDP increases. The intercept term (a_0) is

-23614.4 which indicate that Y would be -23614.4 if the independent variable X_1 and X_2 is zero. The result shows that MPC of Internal Debt is 36.9, which explains that one unit increases in Internal Debt (X_1) causes GDP (Y) would increase by 36.9 units. Also MPC of External Debt is 16.9, which explains that one unit increases in External Debt (X_2) causes GDP (Y) would increase by 16.9 units. The coefficient of determination R^2 is 0.89 which means that 89 percent of variation of GDP (Y) is determined by the explanatory variables i.e. Internal Debt and External Debt. Adjusted value of R^2 is 0.80 which means 80 percent of Internal Debt and External Debt are influenced by GDP. Similarly, the calculated F-value is 8.62 at 5 percent level of significance, which is greater than tabulated F-value 3.52 which implies that the model is statistically very significant. Since the calculated t value of a_0 (-0.569) is less than tabulated value 2.080 at 5 level of significance so it is statistically not significant. However the calculated t value of a_1 (10.144) and a_2 (3.116) are greater than tabulated value at the same level of significance and degree of freedom so they are statistically significance. The D-W test (d) is 1.09 at 5 percent level of significance. We can find the tabulated value of $d_l = 0.831$ and $d_u = 1.407$. Thus, $0.831 < 1.09 < 1.407$ or $d_l < d < d_u$ so there exist no positive autocorrelation and there is no decision.

6.1.4 Effects of Total Debt on GDP

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

Regression equation Y on X is

$$Y = a_0 + a_1 X$$

Where, Y = GDP (Dependent Variable)

X = Total Debt (Independent Variable)

The result of this equation is:

$$Y = -88061.3 + 29.725 X$$

(-2.291) (10.674)

$$F\text{-test} = 113.93 \quad \overline{R}^2 = 0.84 \quad R^2 = 0.85 \quad a_1 = 29.7 \quad a_0 = -88061.3$$

$$D\text{-W test} = 0.87$$

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 intercept term (a_0) is -88061.3 which indicate that GDP (Y) would be -88061.3 if the independent variable X is zero. The result shows that MPC of Total Debt is 29.7, which explain that one unit increases in Total Debt (X) causes GDP (Y) would increase by 29.7 units. The coefficient of determination R^2 is 0.85 which means that 85 percent of variation of GDP (Y) is determined by the explanatory variables i.e. Total Debt. Adjusted value of R^2 is 0.84 which means 84 percent of Total Debt is influenced by GDP. Similarly, the calculated F-value is 113.93 at 5 percent level of significance which is greater than tabulated F-value 4.35 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. Since the calculated t value of a_0 (-88061.3) is greater than tabulated value 2.080 so it is statistically significant. However the calculated t value of a_1 (29.7) is greater than tabulated value at the same level of significance and degree of freedom so they are statistically significance. The D-W test (d) is 0.87 at 5 percent level of significance we can find the tabulated value of $d_l = 0.914$ and $d_u = 1.284$. Thus, $0 < 0.87 < 0.914$ or $0 < d < d_l$. So there exist no positive autocorrelation or the study is statistically significant.

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.

Appendix – A

Internal Debt, External Debt, Total Debt and GDP

Rs. in Million

FY	Internal Debt	External Debt	Total Debt	GDP
1985/86	1403.4	2501.1	3904.5	53215
1986/87	1644.7	2705.8	4350.5	61140
1987/88	1130.0	3815.8	4945.8	73170
1988/89	1330.0	5666.4	6996.8	85831
1989/90	2150.0	5959.6	8109.6	99702
1990/91	4552.7	6256.7	10809.4	116127
1991/92	2078.8	6816.9	8895.7	144933
1992/93	1620.9	6920.9	8540.9	165350
1993/94	1820.8	9163.6	10984.4	191596
1994/95	1900.0	7312.3	9212.3	209976
1995/96	2200.0	9463.9	11663.9	239388
1996/97	3000.0	9043.6	12043.6	269570
1997/98	3400.0	11054.4	14454.4	289798
1998/99	4710.0	11852.4	16562.4	330018
1999/00	5500.0	11812.2	17312.2	366251
2000/01	7000.0	12044.0	19044.0	394052
2001/02	8000.0	7698.7	15698.7	425454
2002/03	8880.0	4546.4	13426.4	444052
2003/04	5607.0	7629.0	13236	473545
2004/05	8938.1	9266.0	18204.1	517993
2005/06	11834.2	8214.4	20048.6	630300
2006/07	17892.3	10053.5	27945.8	696989

Source: Economic Survey, 2006/07, MOF, GON.

LINEAR REGRESSION MODEL

S.N .S. N.	Variables			Result			R ²	Adj. R ²	t-test			F- test 101. 51	D-W test
	Depende nt	Independen t		a ₀	a ₁	a ₂			a ₀	a ₁	a ₂		
1	GDP	ID	-	86959. 6	40.9	-	0.83 5	0.82	3.36 7	10.0 75	-	101. 51	0.79
2	GDP	ED	-	2583.5	36.6	-	0.30	0.26	0.02 5	2.93 6	-	8.62	0.20 8
3	GDP	ID	ED	- 23614. 4	36.9	16.9	0.89	0.80	- 0.56 9	10.1 44	3. 11 6	8.62	1.09
4	GDP	TD	-	- 88061. 3	29.72 5	-	0.85	0.84	- 2.29 1	10.6 74	-	113. 93	0.87

GDP = Gross Domestic Product

ID = Internal Debt

ED = External debt

R² refers to coefficient of multiple determinations

Adj. R² refers to coefficient of multiple determinations

Source: Appendix - A

CHAPTER SEVEN

PROBLEMS AND PROSPECTS OF PUBLIC DEBT IN UNDERDEVELOPED COUNTRIES

7.1 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 favour of investment in real estate, that gives them social prestige and for jewellery 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 in 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.

7.2 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 EIGHT

SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS

8.1 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.

8.2 Major Findings

-) In the study period from 1985/86 to 2006/07, the government revenue has increased from Rs. 4644.5 million to Rs. 87712.1 million with the average annual growth rate of revenue is 14.5 percent. In the same period, the expenditure has increased from Rs. 9797.1 million to Rs. 133604.6 million with the annual average growth rate of 12.8 percent. But the growth rate of revenue is not sufficient for financing the increased government expenditure.
-) The gap between revenue and expenditure was Rs. 5152.6 million in FY 1985/86 and it has increased to Rs. 45892.5 million in FY 2006/07. 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.
-) The amount of internal debt was Rs. 1403.4 million in 1985/86 and it has increased to Rs. 17892.3 million in FY 2006/07. Similarly, the amount of external debt was Rs. 2501.1 million in FY 1985/86 and it has increased to Rs. 10053.5 million in FY 2006/07. Percentage share internal debt and external debt in total debt in FY 1985/86 was 35.9 and 64.0 percent respectively. Internal debt has increased to 64.0 percent and external debt has decreased to 36.0 percent. But the average annual growth rate of internal debt is 34.4 and external debt is 65.2 percent. Thus the portion of external debt has been increasing in each fiscal year.

-) In internal sources, government receives debt of Rs. 3080.0 million from treasury bills, Rs. 2290.0 million, from development bonds, Rs. 1500.0 million, from national saving certificate, Rs. 320.2 million and from special bond in FY 1985/86. But in FY 2006/07, debt from treasury bills is Rs. 74445.3 million, from development bonds is Rs. 191771.1 million, from national saving certificate is Rs. 1516.9 million and from special bonds is Rs. 7225.7 million. This shows that the trend of internal debt is rising. The average annual growth rate of treasury bills, development bonds, national saving certificate and special bond is 35.4 percent, 20.3 percent, 17.2 percent and 26.7 percent respectively.
-) Total external debt was Rs. 2370.9 million in FY 1985/86 in which Rs. 498.9 million was taken from bilateral and Rs. 1872.0 million from multilateral sources. It has gone up to Rs. 10053.5 million where Rs. 9004.6 million from bilateral and Rs. 1048.9 million from multilateral sources. In the study period the share of bilateral sources is 89.6 percent and share of multilateral sources is 10.4 percent.
-) Average annual growth rate of total external debt as a percentage of GDP is 3.3 percent where as percentage share of bilateral and multilateral sources is 0.5 percent and 2.8 percent respectively. This shows that the external debt is heavily depend upon multilateral sources.
-) The outstanding internal and external debt in FY 1985/86 were Rs. 6031.6 million and Rs. 10330.2 million respectively. But in FY 2006/07, both outstanding internal and external debt has increased to Rs. 93031.9 million and Rs. 216200.7 million respectively. The annual average growth rate of internal and external debt as percentage of GDP is 13.7 percent and 44.4 percent.
-) In FY 1985/86, fiscal deficit was Rs. 3979.7 million which is increased to Rs. 30091.7 million in FY 2006/07. The fiscal deficit is increasing in each fiscal year. The annual average growth rate of deficit is 9.0 percent.
-) The total debt servicing was Rs. 1019.6 million in FY 1985/86 which has increased to Rs. 22916.3 million in FY 2006/07. During the period

between 1985/86 to 2006/07, the average annual growth rate of total debt servicing as percentage of GDP is 2.7 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.

8.3 Conclusion

This study has analyzed the impact of increasing trend 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 58.1 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.

8.4 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, which 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.
-) 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, improper allocation of resources etc.
-) The internal borrowing mobilization for development purpose has come from banking sector which creates inflation. So government should try to minimize borrowing from banking sector and should initiate policies to attract maximum borrowing from non banking sector and there should be put legal ceiling on government overdrawing from the bank.

-) 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.
-) To increase the debt servicing capacity, government should increase GDP growth, revenue growth and export earning growth in sustainable path so that country will not trapped on debt servicing problem.
-) The government should be active enough to maintain the strong policy of monitoring, evaluation and supervision which help to reduce corruption and to increase an accountability, responsibility and implementation.
-) And proper attention should be given to the macro-economic stability of the country while accepting short-term and long-term loans.
-) 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.
-) Nepal is indebted day by day with external and debt payment burden. So country should generate new sources to stop external borrowing and debt servicing burden.
-) 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.
-) To reduce 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.

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