

# CHAPTER I

## INTRODUCTION

### 1.1 Background of the Study

Finance is essential for the all sector like individual, household, business as well as for government also to fulfill their revenue and expenditure as borrowing and lending. Government of any of the country in the world gets its financing income mainly from two sources one internal and another is external based on geographical classification, internal source can be categories into two types namely tax revenue and public debt (internal borrowing). Government financing through foreign country's fund (either aid or debt) is known as external source of financing. And on the basis of income source it can be also classified in two ways are Government revenue and Government borrowing (debt). It is not obligation public revenue (i.e. from tax and custom duties) to return anyone else. On the contrary, public debt carries with it the obligation to pay money back to lenders (Persons, institutions, or countries) from whom it has been obtained, Debt borrow from citizens of own country is called internal debt and debt borrow from other than internal source i.e. foreign country is called external debt. An internal debt is owed by a nation to its own citizens and it poses no burden but an external debt is owed by a nation to foreigners and it is burdensome.

There is consensus in defining public debt. The accumulated amount of what the government has borrowed to finance past deficits is called public debt." ( Samuelson and Nordhaus,1992: 185) Public Debt refers to the process of raising loans from internal as well as external sources. Therefore, the public debt is the total amount of debt raised through internal and external sources. "Public debt carries with its obligation on the part of the government to repay the loan together with interest to the people from whom it has been taken." (Vaish and Agrawal, 1992: 192) The government of any country can go to Bimestic and or international capital market and borrow funds from there. In this context, Vaish and Agrawal have further elaborated that "Internal debt is raised . the government from the individuals and institutions within the country while external debt is taken by the government from individuals, institutions and governments of foreign countries." (Vaish and Agrawal, 1992 : 196).

The relationship between government and public is interdependent and correlated, Governments are preparing all policies, strategy and plans to social stability, development and national sovereignty. In other words all government moves are public oriented. In order to fulfill social needs government require money or funds. That money for government could be arisen from tax collection, custom duty, revenue from investment on development sector and public enterprises. Most of the developing countries also get the foreign aid to fulfill their deficit. Despite these collections government could not meet the gap between revenue and expenditure or if government has to spend more money than budgeted then it could be fulfill through eternal public debt. This is collected by issuing bonds and notes.

In developing and other countries financing government budget is the main problem. One easy way of financing for the government is increase tax rate which may results unbalanced economy through increase in price level. To escape from this complex situation the government can utilize the public borrowing methods. Public debt can be collected through market borrowing and non-market borrowing. Government securities and bills are the example of market borrowing, which have fixed repayment time and interest rate. Non-market borrowing covers the small savings of the people in bans as well as post offices and co-operatives, which may be used in investment indirectly.

The Governments of developing countries are facing various problems relating to the public borrowing. First, the source of debt is narrowing due to two and unorganized level of domestic savings and inadequate banking facilities in rural areas rather than areas to assemble the saving for national development. Second, the capital it is in a preliminary stage and the organized private sector is not enough to the necessary amount of money to spend in securities and bond. In addition, tenth in the developing countries which occurs in real estate (such as land, dings and precious metals) which reduces the liquidity of the people and in turn, errs the borrowing from non-banking sector.

Nepalese economy is based on mixed economy. Nepalese economy was always facing economic instability from earlier stage of economic development. Government is always struggling for control and fulfills the deficit budget. History of public debt in Nepal is not such a long one. Though there are some traces of public borrowing in

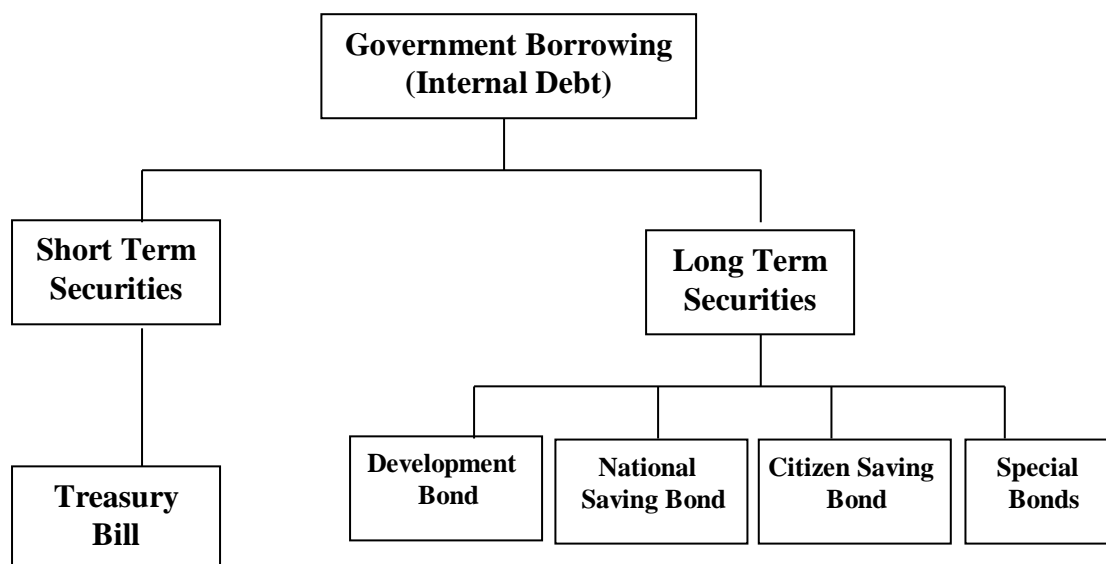
history, however the scientific borrowing in Nepal has started in 1962 after the promulgation of Public Debt act 1962. After promulgation of these acts the process of raising internal debt has been started in systematic manner in Nepal. Treasury bills are auctioned every week and long-term bonds are issued within the various months within a year. The trend of public borrowing is increasing each and every year. Similarly, in the process of obtaining external debt the first foreign creditors being SR and UK in 1963/64. Gradually, the process of raising loans from internal and external sources is come out like basic needs of government budget of Nepal.

During the plan periods the government initiated to pay the public in the form of debt securities as well as to lunch some programs. The government issued compensation bonds for land acquisition with the interest rate of 3% per annum and with the maturity periods of 10 years, amounting Rs. 407 thousands and compensation bonds with one percent interest rate for 20 years of maturity, amounting Rs. 5.56 million, The other components of the borrowing were also made from Nepal Rastra Bank (NRB) and it was provided against special bonds to the government. The government started to borrow by issuing national saving certificate since 1984, which amounting Rs. 5 billion.

Central bank has a major task and responsibility to stabilize the economic growth and financial system. Thus all the major government fiscal, monetary and economic policies are being smoothly implemented in the country with the active support and help of the central bank. The Nepal Rastra Bank (NRB) fulfills the role of the central bank in Nepal. It also serves as a banker to the government. It also regulates and foreign exchange operation, banking system and financial institutions and as lender of last resort. It is actively involved in the development and reform the financial sector.<sup>4</sup> Borrowing fill the gap between revenue and expenditure, expenditure exceeds revenue government can borrow through increase tax, debt, external debt etc.

tackle the deficit budget of Nepal, NRB issues various types of securities to collect funds from public.

**Figure 1.1**  
**Internal Borrowing Instruments issued in Nepal**



### **1.2 Statement of Problems**

There are so many researches and studies have been held in the field of public debt since some couple of years. The process of raising loans from internal sources, external sources, the level of borrowings, indebtedness of the country, the fiscal responsibility of the government and other aspects related to public debt management has been the concerned area for researchers, academicians, economists and students. Whereas public debt is a legal obligation on the part of government to make interest and/ or amortization of payment to holder of designated claims in accordance with a defined temporal schedule. It is created through the government borrowing from individual, corporation, institution and other government. It refers to loan raise by government within the country or outside the country.

Nepalese financial system is weak. It is still in early stage of growth. Asian Development Banks (ADB) states current statement Nepal has 3.8% GDP growth and inflation is 7%. Government has to highly increase their expenditure for satisfactory growth.

The country is going through an economic down turn. The overwhelming view among businessmen is that the market is not expanding. Government revenue collection has significantly declined in terms of projected figures.

Various problems still hold important issue to be discuss.

- ⇒ Problem and obstacle in issuing long term and short term securities by government.
- ⇒ Investors attitude towards government securities
- ⇒ Concern with Cost of Securities issued.
- ⇒ Weather monetary policy is support open market operations of government.
- ⇒ Role of public debt play in the economic growth and stability.

Increasing demand for development fund has resulted government to depend on both types of borrowing internal and external. Developing countries like Nepal always need foreign currency to import goods required for development activities. These countries have to depend more on external borrowing than internal. At the same time, the terms of trade are unfavorable, there is need of borrow from outside in order to finance the balance of payment deficit.

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

Core objective of the study is to analyze internal borrowing mechanism to support the deficit budget to assess the impacts of public debt servicing and outstanding government loan.

Apart from these, the specific objectives of the study are listed as follows:

1. To analyze the trend of government borrowing (Public Debt).
2. To study the effects of public debt on national GDP.
3. To analyze the size, magnitude, composition and disbursement of Nepal's debt.

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

This research aims on making clear vision towards the current issue of internal government borrowing through NRB as the central bank of Nepal as well as external

crowding. Internal borrowing is the way of government financing. Basically internal debt used to fulfill the gap of deficit budget. Occurs when government expenditure exceeds government revenue.

In most of the developing countries they have needed to spend more money for the practice of development and economic growth. Therefore the study about internal borrowing and its influences gives more clear and actual view and trend of investment securities issued by government.

At present Nepalese investment market do not seem to be capable to invest their fund more profitable sectors where there is risk. They are found to be more interested in investing in risk free and liquid sector i.e. in government securities.

Every government faces policies choices concerning how to manage its debt, including source of financing, scope of debt management, focus group of investor or legal authority for borrowing. On the perspective of these issues, this study is concerned with the following aspects.

- ⇒ Sustainability of public debt in Nepal.
- ⇒ Trend of issuing public debt in Nepal.
- ⇒ Better source for borrowing internal and/or external borrowing from trend analysis.
- ⇒ Effective support in monetary policy by public debt system in Nepal.
- ⇒ Relationship between internal debt and external debt.
- ⇒ Way of deficit budget covers by public debt.
- ⇒ Effective management of public debt serving capacity. \ A policy and strategy related with public debt.
- ⇒ Current status of public debt in Nepal.
- ⇒ Overview of public debt in Nepal.
- ⇒ Future aspects and potentiality of public debt in Nepal.
- ⇒ Investors' attraction in government securities of Nepal.

This research will portray the characteristics and importance of the borrowing through public debt.

## **1.5 Limitation of the Study**

The limitation of this study due to lack of time and resources available are as follows;

- This study will consider only last eight fiscal years data (i.e. 2000/01 to 2007/08).
- This study is focused on internal borrowing.
- This study avoids non economic representation of data.
- This study relies only on secondary data and information.
- The data available in the published annual report of Central Bureau Statistics, economic survey and other books, journals and booklets from NRB. So, the validity of secondary data relies on the accuracy of their sources.

## **1.6 Organization of the study**

The study will be organized within five chapters. They are:-

### **1.6.1 Chapter 1- Introduction**

This chapter conceptualizes about the thesis topic by providing general overview on "Its concept of the study, role, the process and procedures to complete it. This chapter consists of the background, statement of the problem, objectives of the study this one-organization of the study.

### **1.6.2 Chapter 2- Literature Review**

This chapter includes review of the existing literature in the relevant areas and past studies. This chapter consists of introduction, conceptual framework, literature in international context and literature.

### **1.6.3 Chapter 3- Research Methodology**

This chapter provides the strategy, structure, framework, guideline and certain to conduct this research work. This chapter consists of research design, natures and sources of data and data processing procedure, tools and techniques for analysis.

### **1.6.4 Chapter 4- Presentation and Analysis**

This chapter is for representation and analysis of relevant data and information. Various analytical tools have been used to analyze and interpret the result.

### **1.6.5 Chapter 5- Major Findings, Conclusions and Recommendations**

The last chapter is concerned with the major findings of analysis, conclusions and recommendation of the study for the implementation in future.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

#### **2.1 Historical Background of Public Debt**

Generally, government raises their required fund from two sources external or internal sources. External source refers to the external debt, foreign loan or aid etc and internal source refer to internal public debt collection.

The first public issue of government securities took place in Holland in 1542. To raise necessary funds, the government of Holland issued various securities, the interest be funded from excise and property taxes enacted for the purpose. Some of these securities were transferable and therefore suitable for resale, and there developed a limited secondary market. Similarly, the first English government security was issued in 1693. In 1694, it chartered the Bank of England to buy government securities. Alexander Hamilton issued the first U.S. government securities in 1790. The idea was copied from these countries worldwide. (*Khan, 1999: 494-95*) similarly in Nepal the first public debt was issued in 1961as terms of T-bill. Then government has been starting to issue another government security like development bond, national saving bond and such type of other securities.

In Great Britain public debt transaction has been emerged since seventeenth century. A group of merchants loaned and grants provided to the government. In return they received the privilege of royal charter to fund the Bank of England. It became the country's central bank. In Britain every state looks after its own individual economic development and welfare in addition to the central governments' plans of developments. Therefore the public debt has become one of the most useful instruments to generate income and to economic development.

In the Central bank of Nepal all operations regarding the public debt were carried out by a section of the Research Department. This section developed into a fully fledged department in 1962as a part of Nepal Rastra Bank (NRB)'s responsibility in effectively managing the public debt of the government which had been growing substantially. In the beginning of this department, it was mainly responsible for

issuing and redeeming be various bonds and treasury bills as part of the government's internal borrowing.

However, more vigorously since the 1990's the NRB besides the overall management of the public debt of the government. To mobilize capital and saving, this department; so issues saving certificates, government bonds, debentures, treasury bills and securities fully guaranteed by the government under repurchase agreement. This department also issues the NRB's bonds. (*Shrestha, 2003: 50*).

## **2.2 Theoretical/ Conceptual Review**

However governments spend more than they currently raise in taxes, they must borrow. And the Public debt is the main source of borrowing for the government to raise the needed fund and then disburse it. Government securities are most liquid, quick marketable and less risky instrument to invest. Public debt in modern age is not confined only to raise fund, but it is equally used to manage fiscal as well as monetary policy. Public debt is conceived as the fundamental part of macroeconomics since every borrowing affects the government fund, deficit financing, saving mobilization, inflation curbing liquidity injecting, resources distribution etc.

The paper of Reserve Bank Staff College on "Public Debt Management" defines that "Public debt comprise of internal and external debt. And, internal debt as the name implies, is raised from the public within the country its self. On the other hand, external debt is raised entirely in a foreign country. The borrowing country either offers its loan for subscription in foreign country and pays the interest and principal in its own (borrowing) currency or takes the debt in the form of loans and pays interest and principal in the currency of the lending country. External debt also includes debts incurred with the World Bank" (Reserve Bank Staff College, 2000; 35).

Public borrowing is applied for the balance between the expenditure and revenue. It is always applied for financing economic development since under developed countries lays face the problem of funds, which is reflected in a larger extent and as ever teasing financial resources gap in the government budgetary. As a fiscal measure, public debt for resource mobilization is of recent origin. Classical economist advocated balance budget and therefore in their analysis the public borrowing was only for the

productive purpose and permanent improvement but not for the current purpose. Keynes' revolution brought change in the role of public borrowing. Keynes held the M that increases in the public debt through multiple effects would raise the national income. It is because Keynes correlated public borrowing with deficit financing. He authorized the government to borrow for all purpose so that effective demand may also increase.

The government of under develop countries can raise resources through public loans in terms of two important methods. First, selling government security to the public that are bought and sold in the capital and money market and of which market process is quoted. This may be called market borrowing. And the second is the funds borrowed by the issue to the public. This is not negotiable and is called non-market borrowing. The level of government is a function of the ability and willingness of persons and business to lend and the government's power and intention to tax.

The developing countries like Nepal have to engage for socio-economic, infrastructure development like health, drinking water, transport, irrigation, communication and power, which need huge initial investment. Here the government should also involve other directly productive economic activities like establishing factories and running them. With the increasing role of government, the government expenditure exceeds revenue; a deficit arises in the budget of the government. The most appropriate method of debt finance preferred by all states for mobilizing financial resources to bridge fiscal deficits in the government budgetary.

Generally following securities issued by government around the world:

- T-bill
- Short term municipal obligation
- Treasury notes and bonds
- Saving bonds and other bonds

"Government debt arises out of borrowing by treasury from banks, business organization and individuals. The debt is in the form of promises by the treasury to pay the holders of these promises a principle sum and in most instance interest on principle" (Taylor, 1971; 69).

### **2.3 Government Budget and Deficit Financing**

Budgeting is the process through which public expenditure decisions are made. A budget is necessary to provide a comprehensive view of revenues and expenditures to facilitate the process of rationing involved in raising and spending of public revenues. It is easier to make ends meet if expenditures and revenues are planned in advance. The planning requires some responsibility and leadership. On the federal level, budgeting also requires a careful consideration of the effects of taxes, expenditures, and debt on the economy as a whole fiscal policy.

Tax revenue and non-tax revenue are major sources of government revenue to meet its budgetary expenses. Taxation on trade, industries, salaries, bank balance are known as tax revenue where as custom, punishment, registration fee, and commissions etc. constitute non-tax revenue. But government always failed to collect required revenue for her expenditure because government wants to keep pleased the traders, industries, farmers, professors, employees and many others. Therefore, government has always faced the problem of budgetary deficit. In this very persistence condition, the government has adopted following methods for financing its budgetary deficit.

1. Printing money
2. Borrowing from home and abroad
3. Drawing down foreign exchange reserve
4. Grants from home and abroad

Due to inflationary and many other adverse effect to macro economy, most of the nations do not want to print the money and make drawing from the foreign exchange reserve for the fulfillment of budget deficit. As besides this, government has also received grants and loan from home and aboard to face the problem of budgetary.

Within the budgetary aspects deficit financing has been continuous phenomenon in Nepalese context. The revenue mobilization has been always fewer than that of the total expenditure outlay. For meeting this resource gap, rising of public debt has been easy instance to be accommodative with the deficit situation. That's why public debt accumulation is increasing each year.

The internal resources mobilization scope in the developing countries is limited.

Especially through revenue collection is extremely limited without the growth of private sector involvement in the economic activities. Private sector seeks favorable environment to grow and adequate infrastructure and market. Without building such infrastructure private sector cannot grow. Therefore, governments of developing countries make budget deficits to create infrastructure and the budget deficit is financed through public debt. Within the plan periods, there are targets, which are represented by the each year budget program. In Nepalese case, there is huge and the deficit in national investment is required to meet by additional resources, which is collected through internal and external resources. That's why the public debt accumulation is increasing very fast.

Budgetary deficit of the country has been increasing year by year. The higher growth of government expenditure relative to resource mobilization accounted for such a budget deficit. Bishnu Mani Pantha has mentioned about public debt in his thesis 'Public Debt in Nepal' that "Nepal has always experienced budget deficit and the annual growth of budget deficit in the last fifteen years period stood at 14.9%. The growth of the budget deficit, in the last fifteen years, varied from negative 38.4% in year 1993/94 to a spurt of 56.1% during fiscal year 2004/05. The budget deficit increased to 12.9% in 2004/05 from the growth of 0.7% in the previous year. In year 1990/91, total outstanding domestic debt increased by 42.1% to Rs. 20.9 t compared to previous year. In the fiscal year 1995/96, fiscal year 2004/05 outstanding domestic debt stood at Rs.34,1 billion, Rs. 87.6 billion respectively. The internal debt financing contributes significantly to the development expenditure of Nepal. However, the increasing burden of debt servicing has drained resources by ailing the investment from socio-economic development and infrastructure ling in the economy.

Fiscal deficit is continuously increasing in Nepal due to lack of proper income engagement of Government to meet the increasing trend of government expenditure. In cal year 2004/05 fiscal deficit stood at 0.7% which is projected to increase up to 12.9% of GDP for FY 2005/06. An analysis of the trend of deficit shows that the size it is gradually widening from FY 2001/02. In FY 2003/04 fiscal deficit for Nepal was Rs. 15.83 billion. It is learnt that more than half the fiscal deficit has been met through external borrowing, 21.9 percent through foreign grants, 17.2 percent through internal borrowing, and the remaining portion as an overdraft from the NRB. The domestic

saving of Nepal is static in nature and insufficient to meet ever-growing investment in the economy. This has resulted in heavy reliance on other sources for financing in the economy as grant, loan, debt and internal borrowings.

## **2.4 Fiscal Policy**

Fiscal policy has concerning the problems relating to full employment of the nation's resources and the maintenance of price level stability. In other words fiscal policy is a government's proposal or strategy of income and expenditure for economic development and stabilization.

In modern concept of fiscal policy government can affect the macro economic variables like production, demand, employment and saving through tax, public debt and expenditure. Fiscal policy is the use of public finance or expenditure, taxes, borrowing and financial administration to further our national economic objective. (Dangi, 2062; 19)

Most economists today would agree in principle to the proposition that an attempt to balance the national Government's expenditures and revenue over the business cycle & a more reasonable fiscal objective than the traditional goal of an annually balanced budget.

Public debt strategy can directly affect the objectives of fiscal policy like social sector development (social welfare), employment generation and inflation control by in-owing funds for infrastructure development and investment purpose in development sector. And it also decreases the supply of money and credit generation through internal borrowing.

In the context of fiscal policy, this dissertation is focus on how government borrowing helped in stability, inflation control and employment.

## **2.5 Monetary Policy**

Monetary policy is one of the most important policies to manage aggregate demand. Like other policies, the primary objective of monetary policy is to attain the macroeconomic goal or objective such as stability, growth, full employment,

favorable balance of payment and so on. Exercise of monetary policy in Nepal began since 1966; monetary policy is formulated by NRB independently to support growth process of the economy. Before liberalization, NRB followed direct monetary instruments such as interest rate, margin rate, statutory reserve requirements (SLR), and so on. However, after economic liberalization, indirect instruments such as cash reserve ratio, open market operation and bank rate have been used. These instruments first affect the aggregate demand and thereby it affects real sector variables such as price level, income, employment, output, and so on. Monetary policy was also extended to make fund available to government at cheaper rates and direct bank credit to the preferred sectors of the economy.

Monetary policy is the branch of the economic policy, which attempts to achieve the board objectives of policy -stability of employment and prices, economic growth and balance in external payments -through the control of monetary system and by operating on such monetary magnitudes as the supply of money, the level and structure of interest rate and other conditions affecting the availability of credit policy is the exercise of the monetary authority to regulate money supply. This regulation concerns to achieve the macroeconomic goals such as stability, growth and so on. It is the exercise of central bank's control over the money supply as an instrument for achieving the objective of general economic policy. Money supply control could be also achieved by trading open market operation through internal borrowing instruments, central bank involves on the transaction of securities.

Monetary policy and public debt management are areas to which the NRB has started to pay more attention in the light of the sound monetary management and macroeconomic stability. The maturity structure of the domestic debt falls in the of public debt management while the interest rates offered on public debt instruments are determined by monetary policy. Improvements in public debt management may contribute to the government's fiscal adjustment efforts and lower the constraints on monetary policy. The domestic debt is generated either to finance a fiscal deficit or to sterilize capital inflows. If the objective is former, then changes in size of debt would require budget deficits or surpluses making it a by-product of I rather than monetary policy. However, if the target is the latter, closer co-ordination between fiscal and monetary policies becomes inevitable. Public debt cement is important in both cases

because the volume and the maturity structure of domestic debt affect future fiscal and monetary policy decisions.

Monetary policy is generally formulated only after the commencement of budget at the beginning of the fiscal year. Monetary policy of FY 2003/04 spelled that bank rate would be used as the indication of monetary policy stance as the open market interest rates including the Repos are determined by the market forces. For the last one decade, OMO (open market operation) are being widely used as flexible short-term monetary instruments in Nepal. The auctions of treasury bills in primary as well as secondary market and repos transactions are being undertaken under the OMO. NRB usually mops up liquidity through outright sales in the secondary market if commercial banks bid below the rate depicted by the yield curve, where as it injects liquidity through outright purchase after adding same percentage points to the yield curve rate.

Consensuses between NRB and HMG have been witnessed for the formulation of various public policies including monetary as well as fiscal policies. HMG has been able to maintain macro-economic stability through proper blending of fiscal and monetary policies.

## **2.6 Short Term public Debt**

Following are the short term government borrowing instruments issued by central bank on the behalf of national government:

### **2.6.1 Treasury bills**

Treasury bill is one of the popular money market instruments issued on a discount yield basis. They bear no interest, the yield being the difference between the purchase price and the redemption value.

Treasury bills are highly liquid, low yield instrument. Government is sue treasury bills frequently either to absorb the excess liquidity of the economy or to meet short term cash deficit of the government. Treasury bills maturity varies from 91 days to 182 days. In our country the authorized organization for T-bill is NRB.

Treasury bills do not carry a promised interest rate but instead are sold at a discount from par. Thus, their yield is based on their appreciation in price between time of

issue and the time they mature (or are sold by the investor), similarly T-bill are sold using auction technique.

### **2.6.2 Short-term Municipal Obligation**

State and local governments including countries, cities and special districts issued a wide variety of short-term debt instrument to cover temporary cash shortages. Two of the most common are tax-anticipation notes (TANs), issued in lieu of expected future tax revenues, and revenue anticipation notes (RANs), issued to cover expenses of special projects, such as the construction of a toll bridge, highway, or airport, in lieu of expected future revenues from those projects. However, the practice of this security has not entered in our country Nepal.

### **2.7 Long Term Public Debt**

Securities with more than one year maturities are traded in capital market. Those securities are classified as long-term securities according to its maturity. Most popular long-term securities are treasury notes and bonds, municipal notes and bonds and saving bonds. Development bonds, national saving certificates and special bonds are the main long-term government securities prevailing in Nepal.

On February 12, 1964, the governments of Nepal first time floated development bond of Rs.13.10 million carrying of interest rate of 6 percent per year with a maturity period of five years. At the same period, the government issued compensation bond for acquisition with the interest rate of 3 percent per annum with the maturity period of 10 years amounting Rs.407 thousands and compensation bonds for land acquisition with one percent interest rate per annum with the maturity period of 20 years amounting Rs.5.56 million. The other component of the borrowing was from NR.B as guaranteed loans and special bonds. The government also started Rs.500 million that year. Similarly in 1991, the government started to borrow by issuing CB pass and other bonds, which amounted to Rs.8478.10 million in that year.

#### **2.7.1 Treasury Notes and Bonds**

Treasury notes are direct obligation of the government with an original maturity of one to ten years. Similarly treasury bonds are, also direct obligation of government over 1.0 years of original maturities. Treasury notes and bonds are more sensitive to

interest rate risk and less marketable than treasury bills; their expected returns (yields) are usually higher than bills with greater potential for capital gain. Treasury notes and bonds are a coupon instrument, which means they promise investors a fixed rate of return.

### **2.7.2 Municipal Bond**

State and local government bodies like district committees and municipalities also issue bonds to meet their financial needs. The securities issued by these local government bodies are known as municipal bonds. Municipals basically include all fixed income financial instruments issued by a governmental unit other than federal government, so far no local government bonds. It is also popular among high tax bracket investors because of tax exemption on municipal bonds. There are two major types of municipal bonds: general obligation and revenue. General obligation municipal bonds are backed by taxing power of the municipality; it means the tax revenue of the municipality principal payment. Revenue bonds are issued to finance capital expenditures for publicly owned utilities such as water, electricity or gas. Therefore, revenue bonds are backed by revenue from designated project. International donors encourage developing local government with sufficient funds to support various development programs.

### **2.8 Reviews in Related Article by Experts and Intellectuals**

Number of intellectuals has made the several studies and research in the field of borrowings. Some of the related to the subject are as follows.

Public borrowing assumed great importance in public finance with the development, particularly during the eighteenth century, of constitutionalism in government, the surpluses with which to make loans, public sanction of credit, and wide powers of taxation. Since then this institution has been widely, and sometimes intemperately, employed by most governments. (Groves and Bish, 1973; 487)

Alexander Hamilton as early as 1781 considered the public debt as "a national blessing." His most urgent task was that of building up the country's credit, internally as well as externally. The key to this problem was the state, the continental, and the foreign debt. (Hamilton, 1850; 220)

James Stuart propounded the views that public debt should function as the balance wheel of economy. Stuart's view is "public borrowing must be adjusted to the conditions of trade at the particular time. Public borrowing is inappropriate as long as circulation is full because it would raise the rate of interest and have undesirable consequences for commerce. On the other hand, when circulation is stagnation in one part of economy, there is unemployment, and a slaking of trade and industry the state should absorb this excess and through its expenditures throw it into new channels of circulation. Thus, the use of public debt is conceived as the balance wheel in the economy from having an adverse effect elsewhere. In addition, public debt is a necessary Instrument of war finance".

In developing country, public debt is used 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 monetary policy for combating with inflation generated in the process of growth and ensures growth with stability. Therefore, it is known as a balancing wheel that controls the tempo of business cycle. The compensatory fiscal policy suggests increase in public expenditures and public works by mobilizing idle saving through public borrowing to create effective demand and to promote economic recovery. (Barman, 1986; 12)

## **2.9 Review of Related Studies**

**Mahesh Raj Joshi (1982)** has prepared a thesis report on *Structure of Public Debt in Nepal*. His study has a period between 1961/62 and 1980/81. In his study, he examined the structure of public debt in Nepal and the importance of public debt in financial development. He reached on the conclusion that system of public debt is one of the best ways of financing development expenditure of the government, which helps to control inflation in the country, and it has helped to mobilize the internal financial resources in the production sector of the economy.

**Bal Govinda Bista (1986)** has reached on the conclusion on his thesis (*Government finance in Nepal*) that the deficit financing in Nepal has exceeded the limit and thus effective measure are necessitated for its control.

**Briju Prasad Sharma (1987)** has prepared a thesis on *Burden of Public Debt in Nepal*. He examined the positive as well as negative impact of public borrowing in the process of economic development. He further maintains, "The expansionary impact of the ownership pattern of securities has contributed to the inflationary spiral in the country. And hence it has caused several real burden of public debt."

**R.D. Singh (1993)** has mentioned in his thesis titled *A study on the impact of internal borrowing in Nepal* analyzed the trend of revenue, expenditure and deficit and effect of under borrowing on money supply, inflation and import. He also analyzed the structure of internal public debt and impact of it on the economy. He has found the most inflationary nature of internal borrowing to increase inflation in the economy.

**Yuba Raj Khatiwada (1998)** in his actual entitled *Public debt management and macroeconomic stability* basically dealt with monetary implementation of public debt. He found that public debt has:

- ➔ Exerted excess monetary expansion, which has indirectly resulted in high rate of inflation and deterioration of current account situation.
- ➔ Debt obligation to the government resulting in higher budgetary deficit which further contributes to monetary expansion having subsequent repression on the internal as well as external sector stability.
- ➔ Has crowded out resources available for private sector investment.
- ➔ Has upward pressure on the market rate of interest.

**Keshar Bahadur Kunwar (2002)** in his dissertation titled *Government borrowing system and practice in Nepal* reached the conclusion that Government borrowing has been increased unlikely and financed mostly on the unproductive sector and hence government always lacks the resources, then borrows the new loan to pay the previous ones. He argued that such excessive dependency upon external loan may lead the nation into a debt trap, if the terms of trade are not improved. Therefore extra care should be exercised in procuring such loans.

**Bishnu Man Pantha (2006)** in his dissertation (*Public Debt in Nepal*) has mentioned, The sound financial policy requires that the government fully fund its budget deficit

by issue of government securities to the private sector at market interest rates not borrow from the central bank. Many countries have an appropriate legislation to deliver this outcome. Nevertheless, the public debt (Domestic Debt) act, 2059 fully allows delivering the sound debt management practices in Nepal; it is effectively achieved by agreement between the Ministry of Finance (MOF), HMG\N and the NRB.

# **CHAPTER III**

## **RESEARCH METHODOLOGY**

### **3.1 Introduction**

Research methodology is the systematic way of solving research problems. It refers to the overall research process, which a researcher conducts during his/her study. This chapter aims to familiarize the relevant techniques of data collection, analysis of data using statistical tools and techniques required for preparation of research report and include research design, population and samples of the study, sources of data and research methods.

### **3.2 Research Design**

Research design is the strategy and framework of conducting research work. The study is based on historical research methodology. The primary objective of this research is to analyze the impact of public debt on the economic development of Nepal. Furthermore, the researcher wants to know the overall impact of public debt, debt-serving capacity of the country and debt sustainability condition of the country. So, analytical and historical cum exploratory designed has been adopted.

### **3.3 Sources of Data**

The study is primarily based on secondary data as the main source of information. The undertaken study is an analytical, descriptive and quantitative are hence empirical.

The data's will be collected through publications of related institutions, various .published, unpublished articles, different books, journals and handbooks.

The sources of data collection are as follows:

- Documents provided by NRB
- Publications of Finance Ministry
- A National Planning Commission's publications
- Publications of Central Bureau of Statistics
- Published Books, Magazines, Journals and handbooks
- Articles and other related materials published in newspapers
- Related Websites

### **3.4 The Description of the Variables**

#### **a) 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.

#### **b) Internal Debt**

The total internal debt is raised by the government from the individuals and institutions within the country.

#### **c) External Debt**

The total external debt is taken by the government from individuals, institutions and/or governments of foreign countries.

#### **d) Debt Servicing:**

The sum of interest and principal repayment of publicly borrowing debt

#### **e) Foreign Currency Reserves.**

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

#### **f) Export**

The value of all goods and non-factor services sold to the rest of the world.

### **3.5 Time Period of Study**

Our empirical analysis is made covering the period of 3 years from 2000/01 -2007/08. The time is designed taking into account the availability of data.,

### **3.6 Tools for Analysis**

Various statistical and financial tools will be employed for interpretation of the data and the mathematical analysis for the sake of fulfilling the objective of the study.

#### **Financial Tools**

##### **For Ratio Analysis**

Some of the ratios are calculated to find out the country's indebtedness, budgetary imbalances, trend of the debt, debt sustainability situation etc. like public debt to GDP, public debt with total debt, public debt to fiscal deficit, government revenue

with total expenditure and total expenditure with GDP etc,

For calculation of growth

$$\text{Growth, } g = \frac{\text{Ending value} - \text{Beginning Value}}{\text{Beginning Value}} \times 100$$

Other financial tools are used to analyze individual securities ratios with total internal debt and total debt.

## **Statistical Tools**

### **Regression Analysis**

Regression lines are expressed by regression equation (or Predicting equation). We forecast the trend of internal borrowing for next five year by solving following equation (Assume X and Y are two variables):

$$Y = a + bX$$

$$\text{Where, } a = \overline{Y} - b \overline{X}$$

$$b = \frac{nS_{xy} - (S_x)(S_y)}{nS_x^2 - (S_x)^2}$$

### **Correlation Analysis**

Correlation analysis is the statistical tool used to describe the degree and direction of linear relationship between dependent variables. Correlations are of many types. Some of them are simple correlation, partial correlation and multiple correlations. Here, we use simple correlation coefficient to know some economic degree and direction related this study.

If the two quantities vary in such a way that movements in one are accompanied by movements in the other, these quantities are correlated. In other words variables are so related that the change in the value of one variable is accompanied by the change in the value of other variable, then they are said to have correlation. Correlation analysis helps us in determining the degree of relationship between two or more variables; it does not tell us anything about causes and effect relationship.

The correlation (r) is calculated by using the following formula.

$$r = \frac{NSXY - (SX)(SY)}{\sqrt{NSX^2 - (SX)^2} \times \sqrt{NSY^2 - (SY)^2}}$$

Where,

r = Correlation Coefficient

X = Independent Variable

V = Dependent Variable

Average and Other related calculations

$$\text{Expected average debt } (\hat{y}) = \frac{\text{Total debt}}{\text{no. of years}} = \frac{Sy}{n}$$

Standard deviation ( $\sigma_j$ ) =

Coefficient of variation (C.V.) = (o/y) x 100 3.7 Methods of Analysis and Presentation

The collected internal borrowing related data's will be analyzed through various statistical and financial representations. Relationship or differences between data and samples will be presented by test hypothesis and future aspects of analysis will be predicted by using regression equation.

Hypothesis should be subjected to statistical test of significance to determine with what validity of public borrowings can be said to indicate potential and importance of public borrowings.

## **CHAPTER IV**

### **DATA PRESENTATION AND ANALYSIS**

#### **4.1 Public Debt in Nepalese Practice**

Public debt management has become an important component in fiscal management. Nepal is raising public debt since 1962. The accumulation of debt in budgetary management has been practicing since 1963. The size of public debt both internal and external was modest during the second plan. Therefore it is increasing year by year. The need of public debt arises when domestic savings fell short of investment requirements. The saving investment gap had not been favorable in Nepal. On the other hand, only the revenue receipt of the economy could not cover the government expenditure without deficit financing. To meet the gap the government has practiced to raise loans from external as well as internal sources.

The major sources of government's income are taxation, administrative income, business income, borrowings and grants as well. The administrative incomes come from the government charges upon provided the administrative services by the government to its people. While business incomes means the returns of various business activities, which are running by the government itself. But the main and only one the major and sustainable revenue of the government is comes from the taxation. Customs, excise, value added tax, corporate tax and personnel income, tax are the major tax practice which are implied by the government.

When expenditure exceeds revenue deficit arises. Economic condition of Nepal has been always facing problem of deficit budget. To fulfill this deficit government has issued public debt. Public debt can be internal or external. Debt borrow from citizens of own country is called internal debt and debt borrow from other than internal source i.e. foreign country is called external debt. An internal debt is owed by a nation to its own citizens and it poses no burden but an external debt is owed by a nation to foreigners and it is burdensome.

Generally public debt is generated so that to boost up the economic activities while the revenue of the government from taxation is not sufficient to meets its budgeted

expenditures for infrastructure development or other development activities and regular expenses as well. But at present it is also been used to meet the government expenditure even to pay the salaries of civil servants, which doesn't help to boost the economic activities. As far as possible it should be avoided to expenses the debt for regular expenses.

The following test will analyze the extent of deficits and debt position of the country.

#### **4.2 Borrowing Trend, Pattern and Structure of Public Debt in Nepal**

The government may borrow because current revenue may not be enough to meet its expenditure. It also borrows because of some sudden and unforeseen expenditure, when tax revenue cannot be increased to the same extent. It may also borrow to finance capital expenditure as current revenue is usually insufficient for the purpose. In fact increased expenditure has been responsible for vast increase in public everywhere.

These days public borrowing is considered as an effective instrument of fiscal as well as monetary policy. Thus as a fiscal weapon it has to play the role of revenue generation and also mobilizes savings for development purpose.

There are two major sources of public borrowing: The borrowing from internal sources and the borrowing from external sources: internally, a government can borrow from individuals, financial institutions (banking and non-banking), commercial bank and the central bank. Similarly, the main sources of the external borrowing are (I) international financial institutions like IMF, World Bank, IDA, ADB etc. these institutions give loans to the member countries for a short term for the covering temporary balance of payment difficulties and for long term for the development projects, (II) And the other well-wisher countries are also provides the development projects.

Since, most of the time the developing countries governments need foreign currencies in order to depend more on external borrowing than the internal. Moreover, at the same time, the terms of trade of developing countries are unfavorable, it had to borrow from outside in order to finance the balance of payments deficits. Nepal is

also indebted from the external debt and seems likely to increase further.

In Nepal, domestic debt management is mainly being carried out with the objectives of maintaining appropriate interest rates, affecting certain type of holder of the debt and short term stabilization of bond prices. The size is not currently being considered. Maturity of the debt is sometimes taken care of, and to achieve these objectives, the first three instruments are being used. Open market operations of government treasury bills are being effectively conducted in IMRB. The debt management committee represented also by the ministry of finance considers also the timing and the size of the bills to be transacted.

The undertaken objectives for PDMN (Public Debt Management in Nepal) are:

- To create capital market
- To influence the size and maturity of debt
- To limit debt service cost
- To achieve short term stabilization of bond prices
- To affect the type of holder of the debt
- To influence the appropriate pattern of interest rates
- To give priority to domestic over foreign issues on domestic market
- To give priority to public sector borrowing

The instruments are being applied to achieve the objectives of PDMN:

- Open market operation
- Timing of issues
- Authorities and bank coordinate issues
- Bond innovations tailored for issues
- Queuing
- Pressure to favor government bonds
- Restriction on foreign access to the market

#### **4.2.1 Public Debt as Source of Deficit Financing**

The regular revenue of the government is not sufficient to cover the development expenditures of the country. So, the deficit between the expenditures and revenues is

bridges by borrowing from external and internal sources. Borrowing from internal sources is considered more convenient than the external borrowing because of the burden of repaying the loan amount in foreign currency. But trends seem different in Nepal, the amount of external borrowings are higher than internal borrowings most of the time. This has been attempted to demonstrate in the following table.

**TABLE 4.1**  
**Expenditure, Revenue and Deficit Financing**

(Rs. In million]

Fiscal Year	Expenditure	Revenue	Deficit/ Surplus	Financing from External Debt	Financing from Internal Debt	Total Debt	Debt as % of Fiscal Deficit (Debt to Fiscal Deficit)		
							Total	Internal	External
2000/01	79835.1	55647.0	-24188.1	12044.0	7000	19044.0	75.6	27.8	47.9
2001/02	80072.3	57131.6	-22940.7	7698.7	8000	15698.7	68.4	34.9	33.6
2002/03	84006.1	67568.9	-16437.2	4546.4	8880	13426.4	81.6	54.1	27.7
2003/04	89442.6	73614.4	-15828.2	7629.0	5607.8	13236.8	83.6	35.5	48.2
2004/05	102560.4	84513.9	-18046.5	9266.1	8938.1	18204.2	100.9	49.6	51.4
2005/06	110889.2	86109.6	-24779.6	8214.3	11834.2	20048.5	80.9	47.8	33.2
2006/07	133604.6	87712.0	-45892.6	10053.5	17892.3	27945.8	60.89	38.98	21.9
2007/08*	163313.0	107546.	-55766.4	11325.4	20500.0	31825.4	57.06	36.76	20.3

Source: Economic Report,

NRB; Economic Survey, MOF/ GON, 2002/03, 2004/05, 2007/08.

### **Revised estimated data**

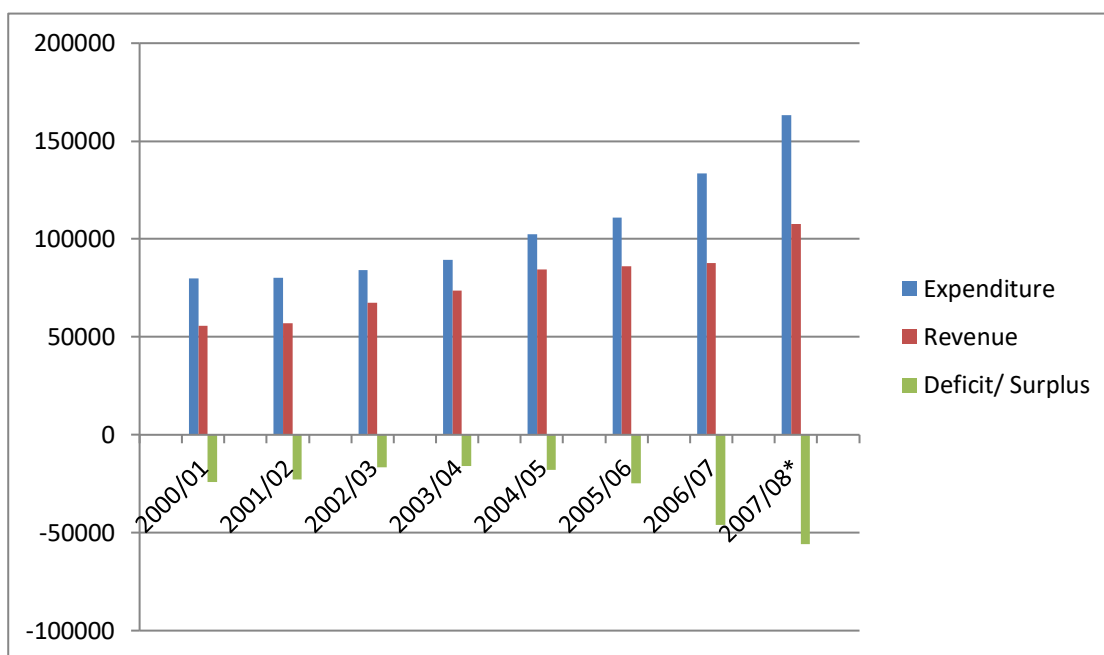
The table 4.1 depicts that during the whole study period of 8 years, there is continuation on fiscal deficit and the deficit position is also increasing rapidly. The budgetary deficit has increased by almost 3 times within 8 years. The deficit position in FY 2000/01 was Rs. 24188.1 million, which has reached at Rs 55766.4 in FY 2007/08. Consequently, the government is trying to meet this gap through internal and external borrowings. The extent of external borrowings and internal borrowing for a year in FY 2000/01 was Rs. 12044 million and Rs.7000 million, which have increased to Rs 11325.4 million and Rs 20500 million respectively in FY 2007/08. The deficit financing composition has also changed within the study period. In the beginning of study period, i.e. in FY 2000/01, out of total deficit around 48 percent was financed through external borrowing and 28 percent through internal borrowings. The case is

almost reversal by the end of

study period. In FY 2007/08, out of total deficit 20 percent is borne through external debt and 37 percent through internal debt. So the burden of external debt is being vigorous than internal debt.

**Figure 4.1**

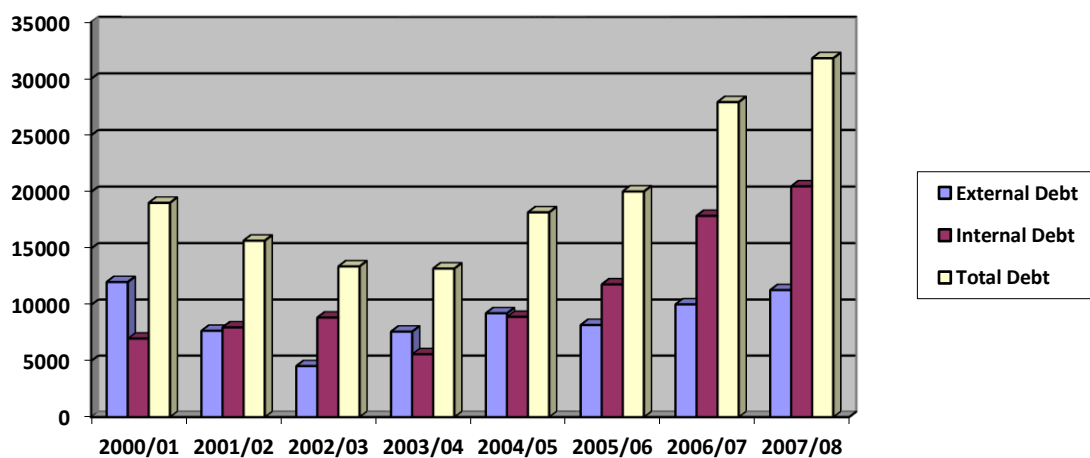
**Trend of Total Expenditure, Revenue and Fiscal deficit**



(Based on Table 4.1)

**Figure 4.2**

**Trend of total Debt, External Debt and Internal Debt**



Total Debt Financing B Financing from External Debt a Financing from Internal Debt  
(Based on Table 4.1)

The figure 4.1 and 4.2 depict that the growth rates of deficit and internal and external borrowings that are observed during the study period. However, there are ups and downs in the growth rates within the period of 8 years, the average annual growth rates of deficit within the study period have stood at 17.25 percent. The growth rates of internal borrowings are higher than those growth rates of external borrowing. The average growth rates of external and internal borrowings have been 5.12 and 20.86 percent respectively. The alarming fact is that the growth rate of internal debt has been -36.9 percent in FY 2003/04 over last year 2002/03.

#### **4.2.2 Public Debt, GDP and Deficit- a growth trend**

Reliance on taxation is not possible in view of the large amount financial resources required for growing government expenditures and therefore, there is increasing need for supplementing it by borrowing internally and externally. Nepal is facing large and growing financial resource gap in the government budgetary. Thus government has to relay upon debt and grants to meet it.

According to World Bank (1995) 'GDP measures the total output of goods and services for final use produced by resident and non-residents, regardless of the allocation of domestic and foreign claims'. Here we also show the analytical relation between GDP and Debt. The growth of debt  $D$  should be equal to or less than the growth of GDP  $Y$ . This suggests that the level of debt is consistent with the economic growth in nominal term and debt burden can be served without a pressure of creating additional debt. The following table depicts the trend of GDP, fiscal deficit and its financing structure of Nepalese economy and debt sustainability through growth of debt and GDP.

**Table 4.2****Annual Growth Rate of Deficit, Total Public Debt and GDP (In Percentage)**

Fiscal Year	Deficit	External Borrowings	Internal borrowings	Total Debt (Rs. in million)	GDP# (Rs, in million)	Growth of Debt(D*)	Growth of GDP (Y*)
2000/01	-	-	-	19044.2	413428	-	-
2001/02	-5.2	-36.1	14.3	15698.7	414092	-17.57	0.16
2002/03	-28.4	-41.0	11.0	13426.4	429699	-14.47	3.76
2003/04	-3.7	67.8	-36.9	13236.8	448654	-1.41	4.41
2004/05	14.1	21.5	59.4	18204.2	461452	37.53	2.85
2005/06	37.3	-11.4	32.5	20048.5	480409	10.13	4.10
2006/07	85.2	22.39	51.19	27945.8	492812	39.39	2.58
2007/08	21.5	12.65	14.57	31825.4	520212	13.88	5.56
Averag	17,25	5.12	20.86			9.64	3.35

Source: NRB, Economic Report, 1999/00, 2003/04, 2007/08, Central Bureau of Statistics.

# Nominal GDP at Basic price

\*\* Revised estimate

The table 4.2 shows that the growth rate of deficit is increasing very fast pace indicating that average growth rate of 17.25 percent. Growth rate of Deficit, External Borrowings Internal borrowings, Total Debt & GDP are shown in Appendix 1,2,3,4 & 5 respectively. Growth rate of internal borrowing seems to be higher than that of external borrowing showing average growth rate of external and internal borrowing 5.12 percent and 20,86 percent respectively. This table also depicts that, in an average Y\* has been lower than D\*, i.e.  $D^* > Y^*$  for the study period which is not favorable. During the FY 2001/02 to 2003/04  $Y^* > D^*$ , after that period once again growth of debt is become higher than growth of GDP. This situation reflects that during the years 2002 to 2004, the growth of debt was consistent with the growth in the GDP, but in the remaining years of the study period it has been not been able to maintain consistency in making the growth rate of GDP higher than the growth in debt. Such situation exhibits that the growth of debt is not sustainable for financial stability. The details calculations of above statistical tools are presented in appendix 1,2,3,4 &5.

**4.2.3 Budget Deficit and Debt Relative to GDP**

In fiscal system of Nepal, the fiscal deficit is financed through both internal and external borrowing. The accumulation of debt is mainly, In Nepal, is due to financing of fiscal deficit. The function of public borrowing is also guided by the indices of

GDP. Theoretically it is assumed that government should borrow the internal debt in limit of 1-2 percent of GDP for the betterment of the economy. But there is no any boundary in case of foreign borrowing however; it is considered keeping it within certain limit of GDP.

The table 4.3 shows the trend and ratios of GDP with Fiscal Deficit and with Public Debt. The fluctuations of these conditions are also shown in graph on Figure 4.3 and 4.4 respectively. From table we can see the gradual increment of GDP and Debt in 2000/01 to 2007/08.

**TABLE 4.3**  
**Budget Deficit and Debt Relative to GDP**

(Rs, in million)

Fiscal Year	Deficit/ Surplus	GDP	Deficit as % of GDP (Deficit to GDP)	Total Debt	Total Debt as % of GDP (Debt to GDP)
2000/01	-24188.1	413428	5.85	19044.0	4.61
2001/02	-22940.7	414092	5.54	15698.7	3.79
2002/03	-16437.2	429699	3.83	13426.4	3.12
2003/04	-15828.2	448654	3.53	13236.8	2.95
2004/05	-18046.5	461452	3.91	18204.2	3.94
2005/06	-24779.6	480409	5.16	20048.5	4.17
2006/07	-45892.6	492812	9.31	27945.8	5.67
2007/08*	-55766.4	520212	10.72	31825.4	6.12

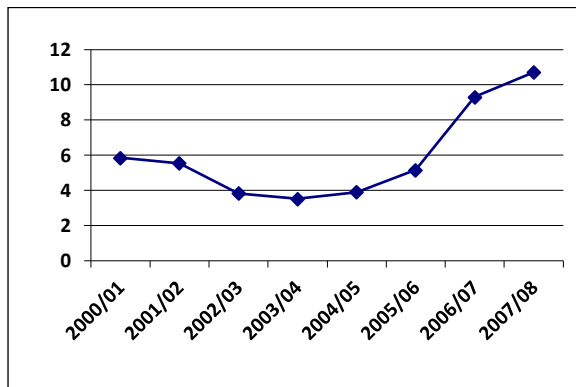
Source: NRB, Economic Report, 1999/00, 2003/04, 2007/08, Central Bureau of Statistics

\* Revised estimate data

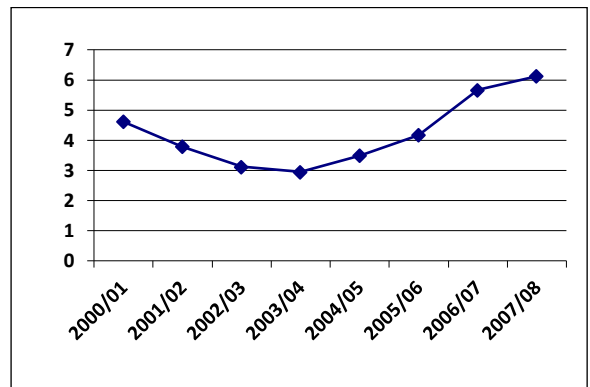
The share of deficit out of GDP in FY 2000/01 is 5.85 percent. Deficit as percentage of GDP are seem fluctuating around 3 to 10 percent in review period. While GDP increased from Rs. 413428 in FY 2000/01 to Rs. 520212 in FY 2007/08. And the ratio of Debt to GDP is fluctuating within the range of 3-6 percent from 4.61 percent in FY 2000/01. It indicates our satisfactory progress of GDP compare with the indebtedness of the country. Whereas total debt is also in increasing trend from Rs. 19044 in FY 2000/01 to Rs. 31825.4 in FY 2007/08. The following graphs show the trend of two

different ratios with GDP. Which is not constancy, both seems volatile.

**Figure 4.3 Deficit to GDP**



**Figure 4.4 Debt to GDP**



(Based on Table 4.3)

#### 4.2.4 Time Series Analysis of Total Debt Borrowing

The time series analysis is used to measure the change of data over a period. It is an arrangement of statistical data taken at its time of occurrence. In other words if the values of the variables are recorded at different period then the series so formed is called time series.

**Table 4.4**

**Time Series Analysis of Government Borrowing**

(Rs, in million)

Years (X)	Total Debt (y)	x=(X- 2904}	xy	X <sup>2</sup>	Trend Value, Yc	Y-Yc	Y/Yc *100
2000	17312.2	-4	-69249	16	13088.9	4223.28	132.27
2001	19044.0	-3	-57132	9	14726.2	4317.81	129.32
2002	15698.7	-2	-31397	4	16363.5	-664.76	95.94
2003	13426.4	-1	-13426	1	18000.7	-	74.59
2004	13236.8	0	0	0	19638	-6401.2	67.40
2005	18204.2	1	18204.2	1	21275.3	-	85.57
2006	20048.5	2	40097	4	22912.5	-	87.50
2007	27945.8	3	83837.4	9	24549.8	3395.99	113.83
2008	31825.4	4	127302	16	26187.1	5638.32	121.53
Total	Zy=	2x <sup>0</sup>	2xy	SX <sup>2</sup>			
(£)			=98236.6	=60			

The formula used for the purpose is;

$$Y_c = a + bx, \quad a = \frac{\sum y}{n} = 19638$$

$$b = \frac{\sum xy}{\sum x^2} = 1637.27$$

Where,

- $Y_c$  = Trend Value
- $a$  = Mean value of total debt
- $b$  = Change in  $y$  as per  $x$  or slope of the trend line

The above table 4.4 shows the trend of total borrowing, its variations, and percent of trend.  $Y_c$  shows the estimation of trend where as  $Y - Y_c$  helps to find out the cyclical variations and percent of trend shows the trend of total debt as percentage.

From the above table, it is apparent that line of government borrowing is different to the actual amount. When actual amount is Rs. 17312.2 million, the estimation is just Rs. 13088.9 million that creates the variations of 4223.28. However, the year 2002 to 2006 the trend of total debt is below the estimation line. We can see that the trend is above the estimated trend line during the year from 2000 to 2001 and the year 2007 to 2008. Percent of trend also express the same that the estimation of trend is a line (i.e. 100) and above 100 indicate the trend line above estimation. Thus 129.32% in 2001 and 95.94% in 2002 and so on, clarify the trend of total debt borrowing is in fluctuating trend in comparison with estimated line,

#### **4.2.5 Budget Deficit and Total Debt - A Correlation Analysis**

Government budgetary deficit necessitates borrowing from the internal and external sources. Government deficit is the church of government borrowing. Thus, government deficit and total borrowing is correlated. The correlation between government deficit and total borrowing is analyzed through the following data presented in the following table

**Table 4.5**

**Correlation Analysis between Budget Deficit and Total Debt**

*Rs. in Million*

<b>Fiscal</b>	<b>Deficit</b>	<b>Total Debt</b>	<b>XY</b>	<b>X<sup>2</sup></b>	<b>Y<sup>2</sup></b>
	(X)	(Y)			
2000/01	24188.1	19044.0	460638176.4	585064181.6	362673936
2001/02	22940.7	15698.7	360139167.1	526275716.5	246449181.7
2002/03	16437.2	13426.4	220692422.1	270181543.8	180268217
2003/04	15828.2	13236.8	209514717.8	250531915.2	175212874.2
2004/05	18046.5	18204.2	328522095.3	325676162.3	331392897.6
2005/06	24779.6	20048.5	496793810.6	614028576.2	401942352.3
2006/07	45892.6	27945.8	1282505421	2106130735	780967737.6
2007/08*	55766.4	31825.4	1774787987	3109891369	1012856085
<b>Total (₹)</b>	<b>ΣX=</b>	<b>ΣY=</b>	<b>ΣXY=</b>	<b>ΣX<sup>2</sup>=</b>	<b>ΣY<sup>2</sup>=</b>
	223879.3	159429.8	5133593797	7787780199	3491763282

The formula used for the purpose is:

$$r = \frac{N\sum xy - (\sum x)(\sum y)}{\sqrt{N\sum x^2 - (\sum x)^2} \times \sqrt{N\sum y^2 - (\sum y)^2}}$$

Where,

r = Correlation Coefficient

X = Budget Deficit

Y = Total Debt

$$= \frac{8 \times 5133593797 - 223879.3 \times 159429.8}{\sqrt{8 \times 7787780199 - (223879.3)^2} \times \sqrt{8 \times 3491763282 - (159429.8)^2}}$$

$$= \frac{41068750376 - 35693032023.14}{\sqrt{62302241592 - 50121940968} \times \sqrt{27934106256 - 25417861128}}$$

$$= \frac{3575718352.86}{110364.39 \times 50162.18} = \frac{3575718352.86}{5536118396.77}$$

$$= 0.9710$$

Since, the correlation of the budget deficit and total borrowing is positive i.e. 0.971 which shows that the upcoming budget will further rise and the contribution of the national debt to the budgetary expenditure will also increases.

**4.2.6 Volume of Public Debt outstanding and its Composition**

Debt is merely a means of meeting a portion budgetary situation namely a deficit budget caused by the excess government spending over receipts. Therefore, if we look at the budget of each fiscal year of Nepal, the deficit amount has been mounting up

which further leads to increase the debt portion of the government.

Nepal's experience in public debt is fairly recent in comparison of other developed countries. But the stock of public debt is increasing very fast in Nepal. The stock comprises of internal debt and external debt. Nepal experienced internal debt in 1962 where as external debt in 1963/64. In Nepalese case, the first foreign creditor was USSR and UK.

Nepal's total debt outstanding position has increased by 1.5 Times within the 8 years period. The total debt outstanding was Rs. 260448 million in 2000/01, which has increased to Rs. 327440 million in FY 2007/08. Similarly the external debt and internal debt outstanding position are increased by 1.1 times and 1.8 times respectively during the study period of 8 years. While observing the growth rates, total debt has increased by on an average of 3.45 Percent per annum during the study period. Similarly, the annual average growth rate of external debt and internal debt has been 1.26 percent and 9.41 percent within the study period.

**Table 4.6**

**Public Debt Outstanding and Its Composition**

*Rs. in Million*

FY	Total Debt (TD)	External Debt (ED)	Internal Debt (ID) #	Growth of TD %	Growth of ED %	Growth of ID %	Ratio of ED to TD	Ratio of ID to TD
2000/01	260448	200404.4	60043.7	-	-	-	76.95	2305
2001/02	293746	220125.6	73620.7	12.78	9.84	22.61	74.94	25.06
2002/03	308079	223433.2	84645.3	4.88	1.50	14.97	72.52	27.48
2003/04	318913	232779.3	86133.7	3.53	4.18	1.76	72.99	27.01
2004/05	307206	219641.9	87564.2	-3.63	-5.64	1.66	71.50	28.50
2005/06	328921	234220.0	94710.8	7.07	6.64	8.16	71.21	28.79
2006/07	320405	216628.9	103776.1	-2.59	-7.51	9.57	76.61	32.39
2007/08*	327440	216200.9**	111239.1+	2.19	-0.19	7.19	66.02	33.98
Average				3.45	1.26	9.41	71.72	28.28

Source; Economic reports, Nepal Rastra Bank and Economic Survey, Ministry of Finance, GON

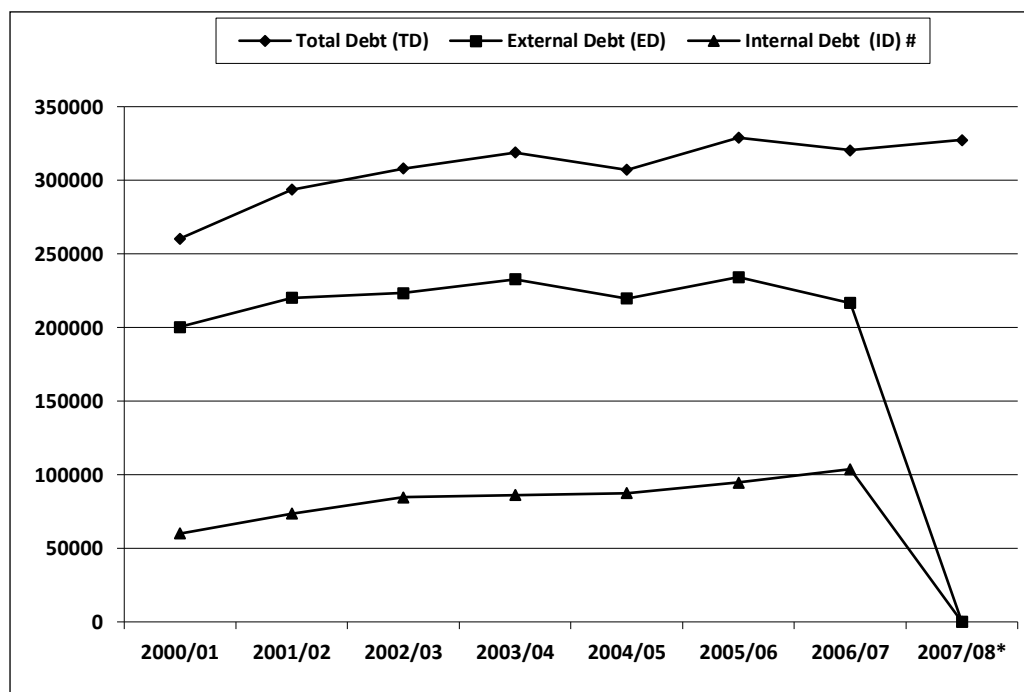
# Includes Treasury Bills, Development Bonds, National Savings Bonds, Special Bonds, Citizen Savings Certificates and IMF Promissory Notes.

+ Includes Treasury Bills, Development Certificates, National Saving Certificates, Special Bonds and Citizen Saving Certificates.

\*\* First 8 month data

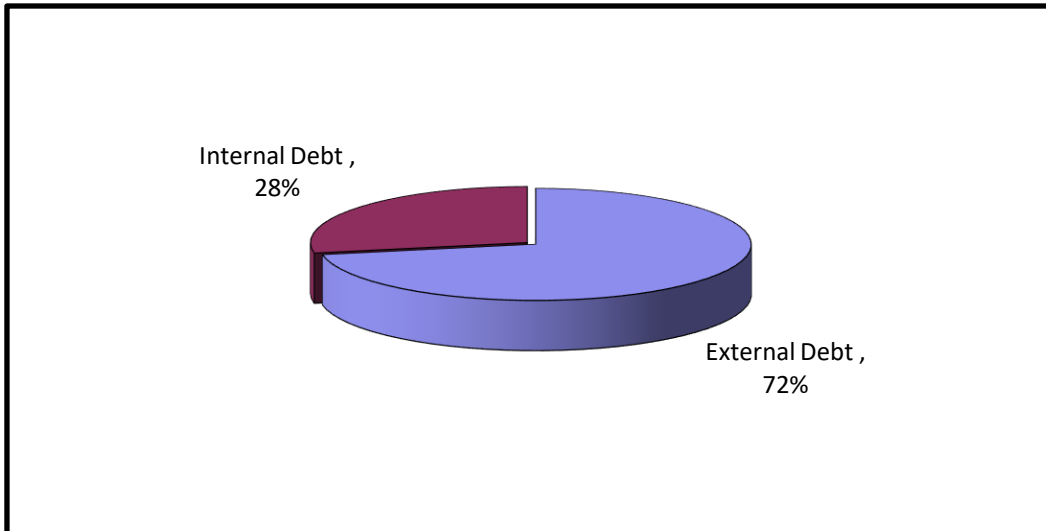
The table 4.6 shows that the growth rates of internal debt were higher in the beginnings of the study period and has been lower in the later periods. Whereas the growth rates of external debt were higher in the beginning, in the period of 2004/05 and 2006/07 it decreased to negative growth rate with fluctuating trend. In an average the share of domestic and external loan is 28.28 and 71.72 Percent respectively in total net outstanding debt. The table provides above shows the extent of total debt, external debt and internal debt positions of the study period on the annual basis. Similarly it also provides the information on how these debt stocks are increasing over the periods.

**Figure 4.5**  
**Trend of Total Debt, External Debt and Internal Debt Outstanding**



(Based on Table 4.6)

Figure 4.5 indicates that the total debt, external debt and internal debt are increasing rapidly. The growth trend of external debt is higher than that of internal debt.



The figure 4.6 shows that, nearly 28% of government borrowing is depending to internal borrowing during the study period. This data show that government of Nepal Firstly seeks the external debt to bridge the deficit gap for any type of financing. However, it may be lower compassable than internal debt.

#### **4.2.7 Share of Outstanding Public Debt in GDP**

The measurement of GDP Is statistically considered the significant source for interpretation of both micro and macro economy. The function of debt borrowing is also guided by the indices of GDP.

Public debt is mounting up in increasing trend. The external debt has increased to Rs. 216200.9 million in 2007/08, from Rs. 200404.4 million in 2000/01/ a staggering rise of 8 percent over the 8 years. Similarly internal debt increased from Rs. 60043.7 to Rs. 111239.1 within the study period.

Table 4.7 shows the percentage share of external and internal public debt in GDP. The outstanding public debt at a rate of GDP has increased from 63 percent in 2000/01 and reached 71.70 percent in 2002/03 percent. Later, it decreased to 62.94 percent in 2007/08.

The part of external public debt vis-a-vis GDP has decreased from 48.47 percent in 2000/01 to 41.56 percent in 2007/08.

Internal debt however, does not cause a direct variation in resources availability for the country, but it may adversely affect on the economic phenomenon of the country,

in case debt is too large and misused. The increasing trend of external public debt shows the dependency of country on the foreign loan. Moreover, the present holding of public debt can impose a burden upon the future generation. It now-a-days, reduce saving to meet the debt finance and there by leaving a smaller amount of capital resources for future. We should, therefore, pay our attention for proper use of public debt so that we can generate the sufficient cash through financing the debt.

**Table 4.7**  
**Public Debt outstanding as a Percentage of GDP**

(Rs. in million)

Fiscal Year	GDP	Total Public Debt	Internal Outstanding Debt	Externs Outstanding Debt	Total PD as % or GDP	Internal PD as % of GDP	External PD as % of GDP
2000/01	413428	260448	60043.7	200404.4	63.00	14.52	48.47 .
2001/02	414092	293746	73620.7	220125.6	70.94	17.78	53.16
2002/03	429699	308079	84645.3	223433.2	71.70	19.70	52.00
2003/04	448654	313913	86133.7	232779.3	71.08	19.20	51.88
2004/05	461452	307206	87564.2	219641.9	66.57	18.98	47.60
2005/06	480409	328931	94710.8	234220.0	68.47	19.71	48.75
2006/07	492812	320405	103776.1	216628.9	65.02	21.06	43.96
2007/08*	520212	327440	111239.1+	216200.9**	62.94	21.38	41.56
Average					67.46	19.04	48.42

Source: Economic Report, NRB; Economic Survey, MOF/ GON, 2002/03, 2004/05, 2007/08.

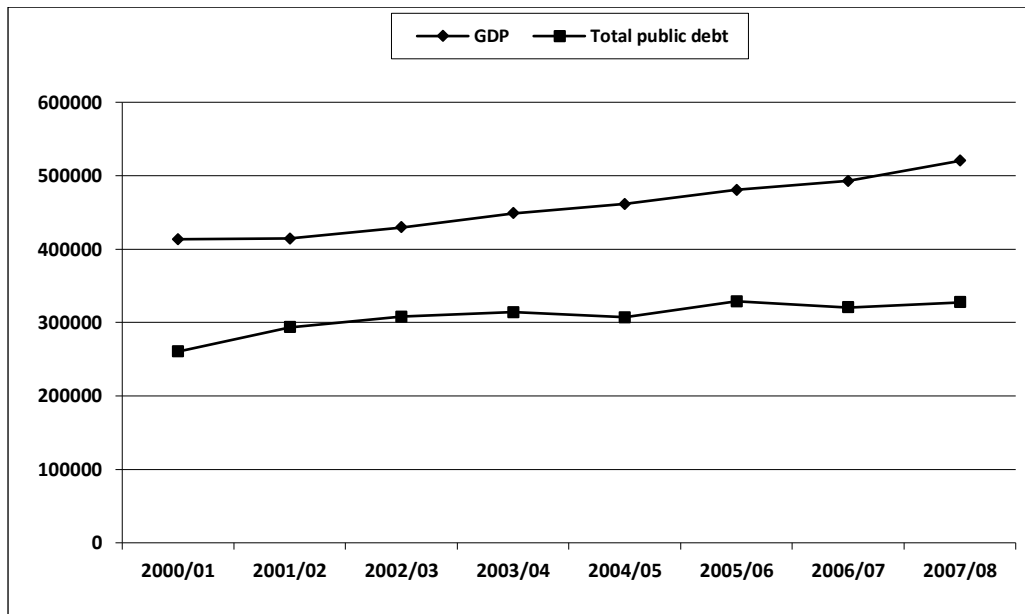
\*\* First 8 month data

# Includes Treasury Bills, Development: Bonds, National Savings Bonds, Special Bonds, Citizen Savings Certificates and IMF Promissory Notes.

+ Includes Treasury Bills, Development Certificates, National Saving Certificates, Special Bonds and Citizen Saving Certificate.

**Figure 4.7**

**Graph on Trend of Total Public Debt Outstanding and GDP**



(Based on Table 4.7)

In the above graph (figure 4.7), we can see the trends of both total public debt and GDP are increasing gradually. At the end of review period growth of GDP seems higher than growth of public debt.

#### **4.2.8 Component Structure of Internal Debt Outstanding**

The outstanding debt to be paid is increasing each year because of the ever widening financial, resource gap of the government to be bridged. On the one hand there is ever increasing trend of financial resource gap (discussed in latter topic) which needs large amount of loans and on the other hand/ there is low amount of repayment as compared with internal borrowing.

The first issue was made in 1962 through issuance of Treasury bill amounting Rs. 7 million. The next instrument of public debt was development bond that was issued in 1963/64 amounting to Rs. 131 million. The government started to borrow by issuing national saving certificate since 1984, worth Rs. 5000 million that year. Now the government raises the internal debt by using various types of instruments such as treasury bills, development bond, special bonds, national saving bond and citizen investment certificates. Basically, there are two types of instruments for internal borrowings. These are called money market instrument and capital market instruments. Treasury bill is money market instrument and it is also used in open market operations

by the central bank. T-bills have maturity of less than one year. All the other government bonds are capital market instruments as these have maturity period of more than one year. Generally, national saving bonds and development bonds have maturity period of 3 to 7 years. Special bonds have the maturity periods as determined by the government. The following table shows the pattern of internal net outstanding of the internal debt.

**Table 4.8**

**Internal Debt Outstanding and Its Components**

(Rs, in million)

Fiscal Year	T-Bill	DB	NSC	CSC	SB	Total ID#
2000/01	27610.8	5962.2 -	12476.4	-	13994.3	60043.7
2001/02	41106.5	11090.7	11536.1	628.1	9259.3	73620.7
2002/03	48860.7	16059.2	9629.9	931.1	9164.5	84645.4
2003/04	49429.6	17549.2	9029.8	1178.9	8946.2	86133.7
2004/05	51383.1	19999.2	6576.8	1428.9	8176.3	87564.2
2005/06	62970.3	17959.2	3876.8	1678.9	8225.6	94710.8
2006/07	74445.3	19177.2	1516.9	1391.0	7225.7	103776.1
2007/08*	85033.0	21735.4	1116.9	3014.4	339.4	111239.1+

Source: NRB, Economic Report, 1999/00, 2003/04, 2007/08, Central Bureau of Statistics.

# Includes Treasury Bills, Development Bonds, National Savings Bonds, Special Bonds, Citizen Savings Certificates and IMF Promissory Notes.

+ Includes Treasury Bills, Development Certificates, National Saving Certificates, Special Bonds and Citizen Saving Certificates.

\* Revised estimated data

The table 4.8 exhibits the composition of instruments on internal debt. The instruments are Treasury Bills (T- Bill), Development Bonds (DB), National Saving Certificate (NSC), Citizen Saving Certificate (CSC) and Special Bonds (SB) in which IMF Promissory Notes is also included. Among these instrument CSC is the newest one, which was introduced in FY 2001/02 to raise the borrowing from the general

public. This instrument is not issued for the organization and institutions. Outstanding of internal government debt was Rs, 60043.7million in the FY 2000/01 and it reached to Rs. 111239.1 million in FY 2007/08 which is about 1.85 times more. Total outstanding of the internal borrowing is seen to be increasing year by year in the above table. T-bills and DB are the major components on internal borrowings. The internal debt rose through issuing T-bills and Db ware Rs. 27610.8 million and Rs. 5962.2 million in FY 2000/01, which has increased by 3 and 3.65 times by FY 2007/08 and has stood at Rs. 85033.0 million and Rs. 21735.4 million respectively. The outstanding of NSC and SB has decreased by 11 times and 2 times by FY 2007/08.

#### **4.2.9 Patterns and ownership of Internal Debt Instruments**

Various types of government bonds issued to raise the internal debt. For this purpose, government of Nepal has issue many kinds of bonds in the market. In Nepalese context, government has issued T- bills, National Saving Certificates, Development Bonds, and Special Bonds. Until sometime before, government has a target to raise loans from banking and non-banking sector. Now such targets have been waived out. During those periods, t-bills and development bonds were used to borrow from the banking sectors where as NSCs was used to borrow from the non-banking sectors. The implication of borrowings from banking sector and non-banking sector is different. Borrowing from the banking system may have credit crunch in the economy but such effects will not happen if the funds are borrowed from public.

The pattern ownership of government bonds is changing over the years. However, the NRB is trying to dispose its bond holdings in the market; it has been able to achieved partial success in this regard. It will also be worthwhile to mention here that, NRB needs to holds the government bonds for many purposes. NRB needs to hold the government securities for monetary policy implementation for which treasury bills are used. On the other hand, sometimes it becomes necessary to the central bank to buy the bonds due to under- subscription by the market in the primary issue. Another component is secondary market operation of the government bonds. In the process government bills and bonds are purchased by the NRB from the market makers and performing REPO trade.

The table provided below depicts that on the ownership pattern of government bonds was around 29 percent with the NRB in FY 2000/01, which has decreased to 21 percent in FY 2007/08. The commercial banks have begun to show their interest in purchasing the government bonds. Commercial banks were holding only 42 percent of government bonds in FY 2000/01 which had increased 55 percent in FY 2007/08. The oscillations in the proportion of such holding also depend on the monetary policy of the central bank. The provisions of higher statutory liquidity ratios, open market operations and introduction of NRB bonds have significant effects on the holding pattern of treasury bills and government bonds for commercial banks.

The introduction of NRB bonds to mop up excess liquidity of the economy by the NRB from 1990 to 1995 surged the interest rate structure of the NRB bonds towards higher side which also compelled to increase in the interest rate structure of treasury bills that time and the interest rates being attractive for the commercial banks their holdings pattern increased to 63 percent on total internal debt outstanding in 1995. Thereafter, it had begun to decrease for three years but from 1999 onwards, commercial banks holding are increasing significantly, due to unavailability of lending opportunity in the economy raised through being poor law and order situation.

**Table 4.9**  
**Pattern and Ownership of Internal Debt Instruments**

(In Percentage)

Fiscal Year	NRB	Commercial Bank	Financial Institutions	Others	Total
2000/01	28.98	42.29	11.93	16.80	100.00
2001/02	32.77	39.88	10.46	16.89	100.00
2002/03	24.24	49.00	11.90	14.85	100.00
2003/04	17.64	53.79	11.89	16.68	100.00
2004/05	15.36	58.61	12.41	13.62	100.00
2005/06	12.28	64.98	10.35	12.39	100.00
2006/07	15.74	66.29	10.26	7.71	100.00
2007/08*	16.95	64.85	10.40	7.8	100.00
Average	20.49	54.96	11.2	13.34	

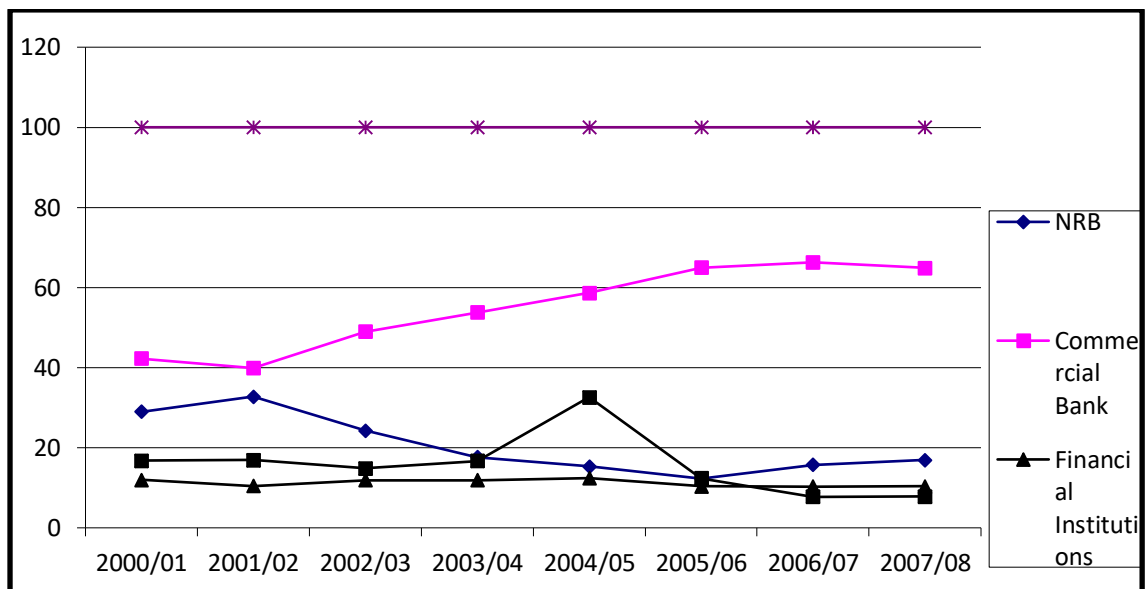
Source: Economic reports, Nepal Rastra Bank and Economic Survey, Ministry of Finance, GON

\* Revised estimated data

However, the ownership pattern of others towards government bonds is decreasing; the ratio on overall position is still negligible. Out of total market share, the others share was 16.80 percent in FY 2000/01, which has decreased to 13.34 percent in FY 2007/08. The significant rise in the ownership structure is observed in FY 2001/02. This is because of introduction of CSC, which was issued targeting to the individuals. Such type of more focused efforts can improve the ownership structure of individuals (included in others) on overall debt composition in the future too.

The following figure shows the past trend structure of ownership of-internal debt outstanding.

**Figure 4.8**  
**Trend of Ownership of Internal Public Debt**



(Based on table 4.9)

The commercial banks ownership pattern seems in increasing trend whereas NRB in decreasing trend. Similarly, financial institutions are in average level but individual owners are decrease in recent years and stayed always within 10 percent level,

#### 4.2.10 Pattern of External Debt in terms of Disbursement by Major Source

Nepal is basically an aid dependent country, which is not able to attract bank lending and has to depend mainly on foreign assistance, grants and loans for the required capital imports. Moreover at the same time, terms of trade of the developing countries (like Nepal) are unfavorable, it has to borrow from outside in order to finance the balance of payment deficits.

Nepal started borrowing the foreign loan from 1964/65 and now, we have the burden of Rs. 11325.4 million (2007/08) of foreign loan. External debt is divided into two parts:

1. Bilateral External Debt
2. Multilateral External Debt

Bilateral loans are loans from foreign government and their agencies. Whereas, multilateral loans are, loans and credits from multilateral agencies such as World Bank, IMF, Regional Development Banks, and other multinational and intergovernmental agencies.

The following table shows the pattern of external debt in terms of disbursement by major sources.

**Table 4.10**  
**Pattern of External Debt in terms of Disbursement by Major Source**  
(Rs. in million)

FY	Total External Debt	Bilateral Debt	Multilateral Debt	% of Bilateral External Debt	% of multilateral External Debt
2000/01	12044.0	586.7	11457.3	4.87	95.13
2001/02	7698.7	87.0	7611.7	1.13	98.87
2002/03	4546.4	657.2	3889.2	14.46	85.54
2003/04	7629.0	66.0	7563.0	0.87	99.13
2004/05	9266.1	126.5	9139.7	1.37	98.64
2005/06	8214.3	40.6	8173.7	0.49	99.51
2006/07	10053.5	1048.9	9004.5	10.43	89.57
2007/08*	11325.4	1054.4	10271.0	9.31	90.69
Average				5.36	94.63

Source: NRB, Economic Report, 1999/00, 2003/04, 2007/08

During the period between 2000/01 and .2007/08 the multilateral external debt has dominated the bilateral external debt: in the structure and composition of external debt

in Nepal. In the beginning year of review period the percentage share of bilateral and multilateral loans on total external debt was 4.87 percent and 95.13 percent respectively. And at the end of study period it remains respectively 9.31 percent and 90.69 Percent of share out of total foreign loans. The table reflects 5.36 percent and 94.63 Percent reliance respectively on bilateral and multilateral loan in an average annual percentage basis.

### **4.3 Analysis of Indebtedness and Debt servicing Capacity**

#### **4.3.1 Trend of Internal and External Indebtedness**

Level of indebtedness shows extent of debt burden of the economy. In this connection there are many indicators available to analyze the indebtedness of a country. Total Debt to GDP ratio is commonly used indicator to measure the indebtedness of a country. These ratios can be further segregated into internal debt to GDP ratio and external debt to GDP ratio. In this study GDP has been taken in nominal terms at current market price.

Nepal remained almost debt free country tilt 1961/62, the outstanding of debt being since 1963. The size of debt both internal and external was modest during the second plan period. Due to the low size of debt servicing obligation were traced in 1960s and also up to mid 1970s. Even at the end of the 1970s total internal debt was less than one percent of the GDP. The level of internal and external debt stood at Rs. 604.8 million and Rs. 346.1 million in 1985. The following table summarizes the level of indebtedness of Nepal and its trends 1975 onwards to have a broad outlook.

**Table 4.11**  
**Indebtedness of the Country**

SN	Indicators	1975	1980	1985	1990	1995	2000	2005
1.	Internal debt outstanding	604.8	1502.8	8031.6	14873.1	32057.8	54357.0	87564.2
2.	External debt outstanding	346.1	1807.3	9203.3	36800.9	113000.9	190691.2	219641.9
3.	Internal debt service	36.1	175.6	488.7	1155.9	3098.6	4711.4	8374
4.	External debt service	12.4	41.4	189.5	1123.6	2984.7	5221.4	8100.0
5.	IQ as % of GDP	3.6	6.4	12.9	14.0	14.21	14.0	18.97
6.	ED as % of	2.1	7.7	19.8	37.0	54.0	52.0	47.59

Source: Economic Report, NRB; Economic Survey, MOF/ GON NRB; Central Bureau of Statistics.

#### **The Trend in Internal Indebtedness**

From the above table, it is evident that internal debt has grown by Rs. 898 million between 1975 and 1980 to reach at level of Rs. 1502.8 million in 1980. The principal and interest payments up to the end of 1974/75 constituted an Rs.36.1 million thereby a small proportion of GDP. The debt amount recorded an increase of Rs. 6528.8 million in end of PC 1984/85 of sixth plan period to reach a level of Rs. 8031.6 million. The magnitude of the debt within sixth plan was the four times the amount recorded in 1980 and thereafter, jumped up by 2.4 times to Rs. 14873.1 million at the end of seventh plan i.e., at the end of FY 1989/90. This amount as a percentage of GDP was 14 percent compared to 12.9 percent of 1985. After this, in the subsequent 10 years period, although the annual borrowing has contributed to increase in the outstanding of internal debt position to Rs. 54357 million but the total internal debt as percentage of GDP remained steady at around 14 percent till end of FY 2000. Unfortunately, it has grown later up to 19 percent in the end of FY 2005

#### **The Trend in External Indebtedness**

The external debt outstanding seemed to be modest up to end of FY 1975. In 1975, the external debt outstanding was just Rs. 346.1 million. The debt went up to Rs. 1807 million within a span of five year, which is more than five times the figure recorded at

the end of FY 1975. Outstanding external debt has increased more than five times during the sixth plan and seven plan too. After the year 1985, the magnitude of external debt has continued to increase every year leading to greater external indebtedness. The amount of external debt has stood at RS. 219641.9 million in the end of FY 2005, which alone has been 47.59 percent of GDP.

#### **4.3.2 Interest Rates and Debt Burden**

Considering debt relative to GDP is still not quite sufficient to give an accurate picture of the debt burden. How much of burden a given amount of debt imposes depends on the interest rate that must be paid on that debt. The annual debt service is the interest rate on debt times the total debt.

Larger debts require even higher interest payment. The interest payment is government revenue that can't be spent on defense or welfare; it's payment for past expenditure. Ultimately, the interest payments are .the burden of the debt. That's what people mean when they say a deficit is burdening future generations.

If interest rates is fluctuate, the debt service also fluctuate; when interest rate risen, the debt service increased; when interest rate fallen, debt service also been decreased.

The annual growth rate of the total debt servicing relative to GDP of the country is shown in the table 4.12 and the trend of debt servicing to GDP shown in the Figure 4.9.

In absolute term the total debt servicing was Rs 10388 million in the year 2000/01. It reached Rs, 22761 million in 2007/08. On an average, its annual growth was 12.91 percent.

Higher debt servicing means debt is mounting each year. Average annual total debt servicing as percentage of GDP is 3.57 percent. This clearly shows that the average annual growth rate of total debt servicing is far higher than that of the average annual growth rate of GDP. It indicates that increasing portion of GDP is spent for debt servicing each year. There is no continuous increase or decrease in the trend of annual growth rate of total debt servicing. We found it in fluctuating form. Annual growth rate of total debt is highest, i.e. 32.86 percent, in fiscal year 2006/07. This may

happen due to repayment of large amount of interest and principal of matured debt. Likewise the annual growth rate of GDP is highest, i.e. 4.41 percent in the fiscal year 2003/04.

**Table 4.12**  
**Total Debt Servicing as Percentage of GDP**

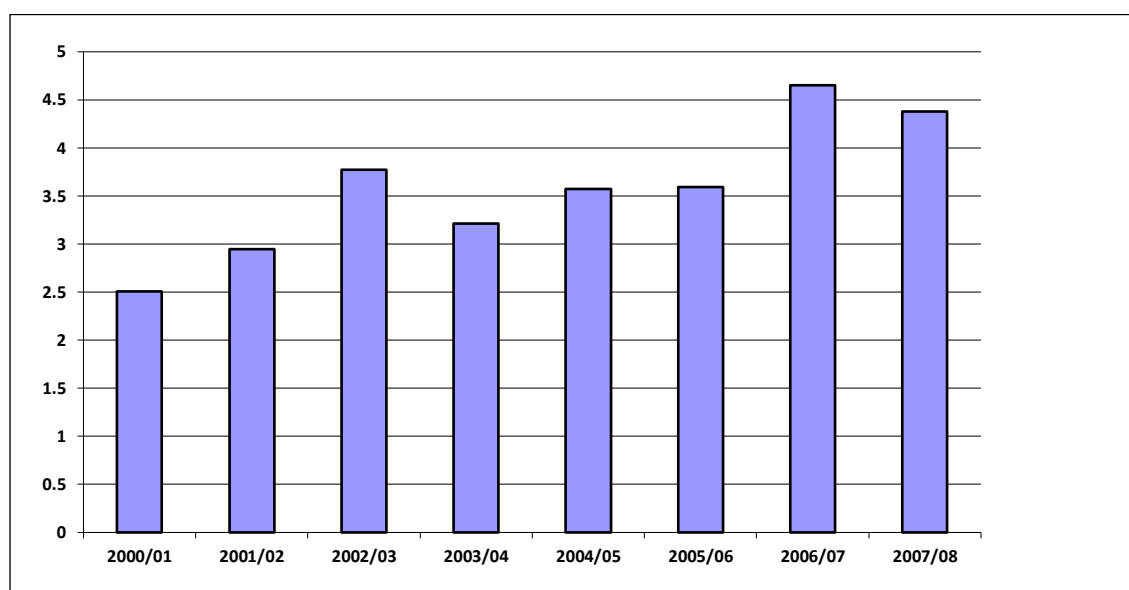
(Rs in million)

Fiscal Year	GDP	Total Debt Servicing	Total Debt servicing as % of GDP	Annual growth rate of GDP	Annual growth rate of total debt seen/icing
2000/01	413428	10388	2.51	-	-
2001/02	414092	12205	2.95	0.16	17.49
2002/03	429699	16181	3.77	3.77	32.58
2003/04	448654	14386	3.21	4.41	11.09
2004/05	461452	16474	3.57	2.85	14.51
2005/06	480409	17248	3.59	4.11	4.70
2006/07	492812	22916	4.65	2.58	32.86
2007/08*	520212	22761	4.38	5.56	-0.68
Average Annual growth rate			3.57	3.35	12.91

Source: Ministry of Finance, Economy Survey, 2004/05, 2007/08; NRB, Economic Report, 2003/04, 2007/08

\* Revised estimated data

**Figure 4.9**  
**Total Debt Servicing Relative to GDP**



(Based on table 4.12)

### 4.3.3 Internal Outstanding Debt and its Servicing

The annual growth rate of internal as well as external debt increasing every year, but the servicing of debt has been difficult due to the low annual revenue of the county. Here, annual growth rate of internal borrowing, its annual growth rate and its servicing has been shown in the below presented table.

**Table 4.13**  
**Internal Outstanding Debt and its Servicing**

**(Rs. in million)**

Fiscal Year	Internal Outstanding Debt	Internal debt Servicing (IDS)	IDS as % of Internal Debt
2000/01	60043.7	4187.0	6.97
2001/02	73620.7	5637.7	7.66
2002/03	84645.3	8661.4	10.23
2003/04	86133.7	7193.0	8.35
2004/05	87564.2	8374.0	9.56
2005/06	94710.8	8096.3	8.55
2006/07	103776.1	13321.8	12.84
2007/08*	111239.1+	12745.9	11.46
Average			9.45

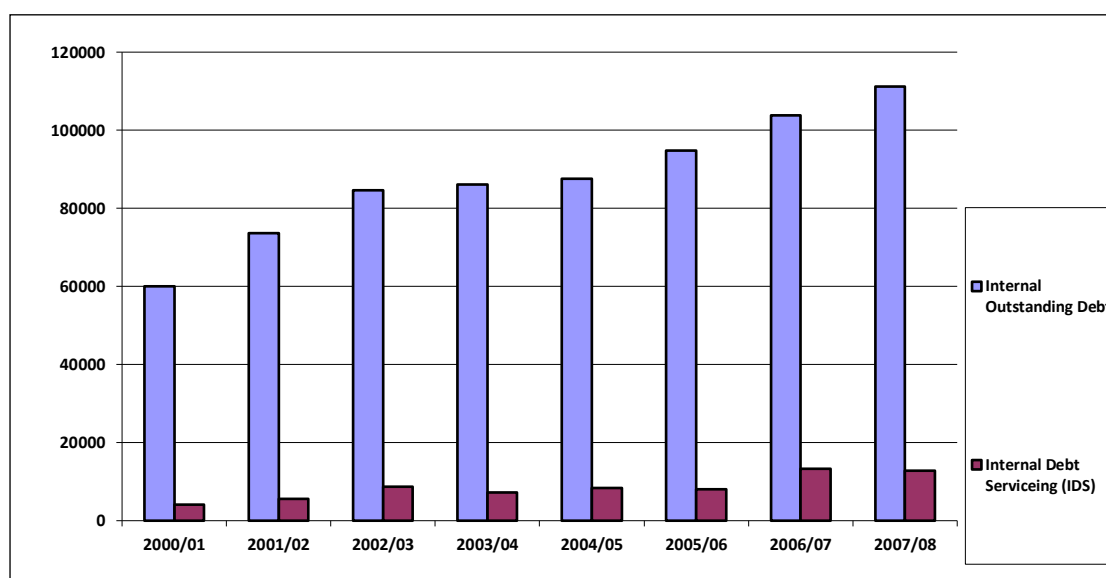
Source: NRB, Economic Report, 1999/00, 2003/04, 2007/08, Central Bureau of

Statistics.

+ Includes Treasury Bills, Development Certificates, National Saving Certificates, Special Bonds and Citizen Saving Certificates.

The above table 4.13 shows the internal debt service relative to internal debt outstanding.

**Figure 4.10**  
**Trends of Outstanding Internal Debt and Its Servicing**



(Based on Table 4.13)

The same table and the figure indicate the facts that the internal outstanding debt of the country is in the increasing trend. The debt servicing (repayment) is also in the increasing. Debt service of internal debt is Rs. 4187 million in 2000/01, which reached to Rs. 12745.9 million in 2007/08. However, the percentage of debt servicing out of outstanding for the year, is very lower i.e. 6.97% in 2000/01, then it increased to 7.66% in 2001/02 and 10.23% in 2002/03. The highest percentage of debt servicing out of outstanding is in the year 2006/07, i.e. 12.84%.

#### **4.3.4 Internal Debt Servicing (IDS) Ratio**

Internal debt service ratio has been calculated though dividing the amount of internal debt service by primary surplus. Internal debt service is the sum of principal and interest payment of a year. Similarly, the primary surplus is the excess amount of revenue receipt of the government over the regular expenditure of a year. This

measures the capacity of the government to serve the internal debt from the revenue without cutting the development expenditures. Lower level of the ratio especially below one is desirable to be maintained in the economy. Most importantly, the lower and decreasing trend of such ratio will fall up to zero and if the primary surplus is not enough to cover the debt service it will be above than one. If the revenue is not enough to cover even the regular expenditures the primary surplus will be negative and hence the ratio will also be negative. The table provided below provides Information on the extent of internal debt service, primary surplus and internal debt service ratio.

**Table 4.14**  
**Internal Debt Service Ratio (IDSR)**

Fiscal Year	Internal Debt Servicing (IDS)	Revenue	Regular Expenditure	Primary Surplus (PS)	IDSR = IDS/PS (in %)
2000/01	4187.0	48893.6	42769.2	6124.4	67
2001/02	5637.7	50445.5	48863.9	1581.6	356
2002/03	8661.4	56229.8	52090.5	4139.3	209
2003/04	7193.0	62331.0	55552.1	6778.9	106
2004/05	8374.0	70122.7	61686.4	8436.3	99
2005/06	8096.3	72282.1	67017.8	5264.3	153
2006/07	13321.8	87712.1	83133.6	4578.5	29
2007/08*	12745.9	107546.5	92577.5	14969	85

Source: Economic Report, NRB; Central Bureau of Statistics; Budget Speeches and Economic Survey, Ministry of Finance, GON.

The table 4.14 provides that the internal debt serving is increasing each year. Within the study period of 8 years it has increased from Rs, 4187 million to Rs, 12745.9 million in FY 2007/08. However, the primary surplus was also increasing from Rs, 6124,4 million of the year 2000/01 to Rs. 8436,3 million in the year 2004/05, but it has begin to decrease since then. It is evident from the table that from the beginning of the study period, debt servicing and primary surplus both were increasing. This type of trend has depicted that the capacity to serve the debt was deteriorating from the beginning. This is because, IDSR was 0.68 in the year 2000/01 which continuously increased up to 3.56 percent in FY 2001/02 Now the IDSR ratio has arrived at 0.85 that reflect the deteriorating position of the government's capacity to serve the debt from internal resource mobilization. This type of situation has

compelled the government to serve the debt either by cutting down the development expenditures or raising additional external/ internal debt to serve the debt.

On an average primary surplus has been greater than debt servings on internal debt throughout the study period. Unfortunately, after FY 2001 the primary surplus has getting decreases till end of the study period. Hence, the primary surplus has been lower than that of debt servicing. Therefore, it can be concluded that however, the government had been able to generate adequate primary surplus to finance additional debt burden till the year 2000, it has been unable to keep the trend and debt to GDP ratios have not been stabilized from FY 2001 years. Therefore, government needs to reorient its borrowing policies.

#### **4.3.5 The External Debt Service (EDS) Ratio**

External debt service payments ratio is a commonly used indicator to measure the borrower's debt service obligation in relation to export earning. This ratio explains the extent of debt service in terms of current export earnings and country's foreign exchange reserve.

If a country's foreign reserves are sound enough to meet the debt obligations, the country concerned will not face an immediate liquidity crisis even if its exports are falling on the country. If the rise and fall in the volume of export of goods and services then the liquidity position of a debtor country may be critical.

**Table 4.15**  
**External Debt Service as Percentage of Export**

Fiscal Year	External Debt Servicing (EDS)	Export	Foreign Exchange Reserve (FE)	EDS/Export (In %)	EDS/FER (In %)
2000/01	6201.4	55654.1	94855.8	11	6.5
2001/02	6567.5	46994.8	106190.7	14	6.2
2002/03	7519.2	49930.6	106996.3	15	7.0
2003/04	7193.2	53910.7	109306.3	13	6.6
2004/05	8100.0	58705.7	130916.9	14	6.2
2005/06	9151.4	60234.1	166101.7	15	5.5
2006/07	9594.4	59383.1	165713.5	16	5.8
2007/08*	10014.6	60787.5	213254.1	16	4.7

Source: NRB, Current Macroeconomic Situation (Based on annual data of 2007/08)

### **Revised Estimated Data**

Table 4.15 shows that External Debt Service (EDS) to export is increasing over the period. The ratio of EDS to export was 11 percent in FY 2000/01, which has increased up to 16 percent in FY 2007/08. This suggests that now 16 percent of export earning is being spent over for servicing the external debt. The higher the level of the ratio of debt service provides little room to the government to retain the export earning for additional capital formation. In this context, it can be said that external debt service obligation is increasing in the economy. The government's external debt service burden is in the high level n relation to the performance of the economy.

Unless and until the export does not increase in proportionate to the external debt service obligation, the government will have been within the turbulent situation in the years to come.

Table 4.15 also shows that the ratio of external foreign debt services to foreign exchange holding declined from 6.5 percent in 2000/01 to 4.7 percent in 2007/08.

### **4.3.6 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 4.16 shows the internal, external and total debt servicing and their percentage share in regular expenditure.

**Table 4.16**  
**Regular Expenditure and Debt Servicing**

(Rs. in million)

Fiscal Year	Regular Expenditure	Total Debt Servicing (TDS)	Internal Debt Servicing (IDS)	External Debt Servicing (EDS)	TDS as% of R.E.	IDS as% of R.E.	EDS as % of R.E.
2000/01	42769.2	10388	4187.0	6201.4	24.3	9.79	14.5
2001/02	48863.9	12205	5637.7	6567.5	24.9	11.54	13.4
2002/03	52090.5	16181	8661.4	7519.2	31.1	16.63	14.4
2003/04	55552.1	14386	7193.0	7193.0	30.4	12.95	12.9
2004/05	61686.4	16474	8374	8100.0	26.7	13.58	13.1
2005/06	67017.8	17248	8096.3	9151.4	25.7	12.08	13.6
2006/07	83133.6	22916	13321.8	9594.4	27.56	16.02	11.54
2007/08*	92577.5	22761	12745.9	10014.6	24.58	13.76	10.81
Average Annual Percentage					26.90	13.29	13.03

Source: Economic report, NRB; Budget Speeches and Economic Survey, MOF/ GON, 2002/03, 2004/05, 2007/08.

In the year 2000/01 total debt servicing was Rs, 10388 million, which was 24.3 percent of regular expenditure of that year. Total debt servicing reached 31.1 percent of regular expenditure in the year 2002/03. It fell in the following years. On an average, the total debt servicing was 26.90 percent of regular expenditure annually over the study period of 8 years.

Internal debt servicing was Rs. 4187 million in 2000/01; it is 9.79 percent of regular expenditure of the same year. Significant increases occurred in the year 2002/03 and 2006/07 by 16.63 and 16.02 percent respectively. Internal debt service on regular expenditure stood at 13.29 percent over the study period.

On the other hand, the external debt servicing was Rs. 6201.4 million in the year 2000/01, which is 14.5 percent of total regular expenditure. The ratio of external debt

senescing to regular expenditure decreased to 10.81 percent in 2007/08. This fluctuation of debt servicing shows unfavorable and unpleasant symptoms for country's economy.

#### **4.3.7 Trend of Development Expenditure and Debt Senescing**

The more the money goes for debt servicing, the less the budget the government will have at hand to run infrastructure development, an anchor for future economic growth, and to spend on social issues.

The table 4.17 shows how the development expenditure has become victims to growing debt servicing. The total debt servicing accounted for 28.1' percent of development: expenditure in 2000/01. However, it rose steadily over the years to reach 32.17 percent in 2007/08. The average ratio of debt servicing to the development expenditure remained at 52.37 percent. The ratio of internal debt servicing to development expenditure grew by almost 1.7 folds over 8 years. It accounted for 11.30 percent in 2000/01 and rose to make up 18.02 percent to 2007/08. Whereas, the foreign debt servicing to development expenditure has been grew from 16.7 percent to 30.9 percent in the year 2005/06 and latter it started to decrease by the level of 14, 15 percent in the year 2007/08.

The debt servicing has growth in an alarming rate in comparison to development expenditure. On an average, the total debt servicing jumped by over 119 percent.

**Table 4.17**  
**Development expenditure and debt servicing**

(Rs. in millions)

Fiscal Year	Development Expenditure	Total Debt Servicing (TDS)	Internal Debt Servicing (IDS)	External Debt Servicing (EDS)	TDS as % of D,E.	IDS as % of D.E.	EDS as % of D.E.
2000/01	37065.9	10388	4187.0	6201.4	28.1	11.30	16.7
2001/02	24773.4	12205	5637.7	6567.5	49.3	22.76	26.5
2002/03	22356.1	16181	8661.4	7519.2	72.3	38.74	33.6
2003/04	23095.6	14386	7193.0	7193.0	73.1	31.14	31.1
2004/05	27340.7	16474	8374	8100.0	60.3	30.63	29.6
2005/06	29606.6	17248	8096.3	9151.4	58.3	27.35	30.9
2006/07	50471.0	22916	13321.8	9594.4	45.4	26.39	19.1
2007/08*	70735.5	22761	12745.9	10014.6	32.17	18.02	14.15
Average Annual Percentage					52.37	25.79	25.20

Source: Economic Report, NRB; Budget Speeches and Economic Survey, MOF/GON, 2002/03, 2004/05, 2007/08.

#### 4.4 Resource Gap in Nepalese Economy

The government has to invest more money to satisfy people's aspiration and keep up development with changing phenomenon. If we look at the budgets of each fiscal year of Nepal, the deficit amount is mounting up gradually. "The government debt has simple relationship with the government deficit; the increase in the government debt over a given year is equal to the budget deficit (Samuelson, 1992)." In other words, a higher rate of economic growth requires a higher level of investment that is not possible only from taxation so that the government seeks public borrowing to meet the deficit amount.

Ever widening the gap between the revenue generation and the expenditures requirement of the Nepal results the resource gap in the country's economy. Following are the major indicators of resource gap in Nepal.

Due to increase of the participation of government in development activities of the country, in order to build basic infrastructure and to provide basic social services like health, education, drinking water and communications.

Due to increase of debt servicing requirements for foreign loans especially the payments of the interest and the investment of principle due.

- Due to increase in the rate if the rate if inflation in the country related by the increase prices of goods and services has also led to rise in resource gap.
- Due to increase trade deficit (payment imbalance).

#### **4.5 Situation of Debt Trap in Nepal**

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

Nepal is facing over increasing problem of resources gap. It has such situation because:

- Productivity very low
- Less contribution by annually ever growing labor force
- Low quality of human resource available
- A traditional nature in tax administration
- The inflow of easy money through various channels
- Sluggish change in the traditional economic structure
- Extreme capital deficiency

Now a day's foreign assistance is seen so essential that each sector of the economy is wholly dependent on it in Nepal. Table 4.6 shows the trend of average internal public debt is 19 percent of GDP, but external public debt is 48.42 percent of GDP. It has the great place as a source of financing trade deficit, fiscal deficit as development expenditure is increasing day by day.

Present scenario shows that the outstanding public debt is nearly 67 percent of GDP in one hand, and debt servicing to GDP ratio is nearly 3.57 percent. This shows that debt is mounted in very high amount in each year. The debt service to regular expenditure remained above 26 percent and only external debt servicing was 13.02 percent of regular expenditure. Corruption and use of low quality manpower misuse the high amount of aid. Aid projects are implemented on the donor priorities. There are neither

scientific systems of aid are effective nor productive. Due to such weakness, the government of Nepal would fall into debt trap. This happens when:

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

From above analysis there is only solace in first and third conditions. Symptoms are Definitely alarming the Nepalese economy,

The average annual ratio of debt senescing to GDP is 3.57 percent but average annual growth rate of total debt servicing is 12.91 percent and total outstanding debt to GDP is nearly 67 percent. The part of debt servicing vis-a-vis regular expenditure is 26 percent. The borrowing that Nepal has raised braced increasing trend. It took fresh loan of Rs. 19044 million in 2000/01 and Rs. 31825.4 million in 2007/08. Analysis said that resources gap is increasing rapidly with the growing trend of regular expenditure and development expenditure.

When the country indebted heavily, it could not pay of external loan in key currencies. Consequently, it falls into debt trap. But Nepal has not faced such situation now. If above situations remain for more years, it has to be requested for postpone the external loan. If so, country loses its credit worthiness and becomes unable to borrow the loan forever. To prevent from debt trap, growth of the productivity of public debt and the rapid economic growth is essential,

#### **4.6 Major Findings**

- Debt financing is not good and bad itself but it should be mobilized on development sectors so that the return of debt financing should be optimal for the government either if it achieved in the long run. Basically the government debt is popular in terms of the secured investment for the investors. So that its charm is still strong and the government is beneficial having the amount with lower interest rate. Lower interest rate certainly helps to the government to achieve economic growth and prosperity through resource mobilization in the

development sectors. The government revenue through public borrowing to bridge the resource gap in the budget has been analyzed in this study.

- 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. Of the annual outstanding loans, the portion of external debt is too higher as compared to domestic loan. In the fiscal year 2000/01, the domestic debt accounted for 23.05 percent of the total debt, while its share was 28.28 percent in 2007/08. Likewise, the share of external loans in total debt decreased to 71.72 percent in 2007/08, down from 76.95 percent in 2000/01, reflecting higher burden of Nepal on foreign loan with comparison to domestic.
- The internal borrowing of the government is in increasing trend, which shows the efficiency of the government on debt management. But the current years the size of the government regular expenditures has dominated the total tax collection. The data says that the government is depending upon the debt even to fulfill the regular budgetary expenditures. The regular expenditure depends highly on internal borrowing than that of external borrowing. Internal borrowing shows the high contribution on revenue growth. Increase in total debt servicing tends to rise in regular expenditure.
- The outstanding public debt soared to reach Rs 327440 million in 2007/08, steep up from Rs 260448 million in 2000/01. In comparison to the GDP, the stock of loan kept up growing. In 2000/01, the loan's GDP ratio was 63 percent. It increased to 71.7 percent in 2001/02. Since then, its ratio began to drop to settle at 62,94 percent in 2007/08.
- On an average, annually around 3.6 percent of the GDP was spent for debt servicing. The annual growth rate of nominal GDP remained at 3.35 percent. But, debt service's growth rate was much higher at 13 percent. The burden of debt service is on the rise. The country spent Rs 10388 million in debt servicing in 2000/01. However, the amount edged up to Rs 22761 million in 2007/08.
- Deficit as percentage of GDP are seem fluctuating around 3 to 11 percent in review period. While GDP is increasing from Rs. 413428 million in FY 2000/01 to Rs. 520212 million in FY 2007/08. And the ratio of Debt to GDP is

fluctuate within the range of 2 -7 percent. It indicates our satisfactory progress of GDP compare with the indebtedness of the country.

- In an absolute term, during the period between 2000/01 to 2007/08 multilateral loan has dominated in the structure of total loans. In an average annual percentage basis, multilateral and bilateral loan has covered 94.64 percent and 5.36 percent of total external debt under the review period respectively.
- Internal debt servicing ratio to primary surplus is Increasing highly showing that 68 percent on 2000/01 to 85 percent on 2007/08. This seems to be serious condition. On case of external debt servicing to export earning has been increased from 11 percent on 2000/01 to 16 percent on 2007/08. And external debt service to foreign exchange reserve has been fluctuating from 6.5 percent on 2000/01 to 4.7 percent in 2007/08.
- The level of debt has been increased by 2 times within the study period, while observing the annual growth rates of public debt; it has been found that the total debt has increased 9.64 percent per annum; external debt by 5.12 percent and internal debt by 20.86 Percent.
- The composition of public debt (internal and external) has not maintained properly. It is 72 percent of external debt and 28 percent of internal debt. Higher the percentage of external debt has a higher risk of changes in the rates of foreign exchange as well as interest cost associated to it.
- The debt servicing growth is higher of revenue's increment rate. On an average, the revenue collection grew by 12 percent, while the debt servicing went up by 13 percent. Approximately 23.86 percent of the revenue was used for debt servicing.
- The debt servicing budget had taken toll on building infrastructure and developing social services. Over the study period, the annual debt servicing budget was around 52.37 percent of the annual development expenditure. If the money used on debt servicing was used for running infrastructure and social projects, it could have made a great contribution for the development.

## **CHAPTER V**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Summary**

This study basically concerns about why developing and underdeveloped countries like Nepal highly depend upon public debt and how to they handle it for the sustainable long run development. Hence, it focuses on indebtedness, debt servicing capacity and debt sustainability condition it is agreeable fact that raising the public debt from certain yardstick does not create economy only unstable but also pushes country into debt trap. Therefore, public debt management holds the serious attention for the government and central bank of developing countries.

In the first chapter, the meaning of the deficits and it's financing through public debt has been examined. In this connection, all the funds collected through borrowed fund to be repaid in the future are defined as the public debt. Public debt can be raised through two sources, these are internal and external debt. Internal debt is raised by the government from individuals and institutions within the country while the external debt raised by the government from individuals, institution and governments of foreign country. This chapter has also overviewed the historical background of public debt in Nepal. However, there are some traces of public borrowings in the history, but the scientific borrowing in Nepal has started from 1962 only after the promulgation of public debt act in 1962. The first instrument issued to raise the internal debt was 91 days T-bill amounting to Rs. 7 million. There after development bonds, special bonds, national saving certificates came into existence. The Citizen saving certificates are the newly introduced instruments in Nepatese bond market. Similarly, the importance of public debt is also viewed in providing funds for the government to developing and maintaining efficient market for the government securities and the role of assisting the monetary policy as well. In this chapter, it has also been further discussed the statement of problem for the study and justification of the study. To sum up, the first chapter has provided a general overview on the concept of the study and procedures applied to complete it.

The second chapter has dealt upon the concerned literatures those were reviewed during the study. The reviewed literatures have provided important information on what are the major and useful indicators in measuring indebtedness and sustainability of the debt of a country and what were the major finding obtained through using such indicators in the earlier studies. However, more than 15 literatures were reviewed which were directly related to the study. Most of the models and ratios have been derived from these research works and applied with recent data available for the study. In fact, these research paper have provide adequate material and knowhow of practical application of statistics for this dissertation.

The third chapter has highlighted the methodology of conducting research work for finding out the trend, structure and impact of the public debt in Nepal. The research has fully depended on the secondary data for this purpose. The data have been collected mainly from the Central Bureau statistics, Nepal Rastra Bank, Ministry of finance, articles, related books and booklets, websites and other materials published in newspaper. The data have been analyzed by using different financial as well as statistical tools. Both qualitative and quantitative methods will have been used in this study.

The fourth chapter has provided in-depth analysis of indebtedness of the country, level of debt servicing and debt sustainability position of the economy. In this chapter debt situation and Interrelationship have been analyzed with other national macroeconomic indicators. The public debt has burden on the different macroeconomic indicators like GDP, revenue, government expenditure, export earning, foreign exchange reserve etc. Major findings of this study were also mentioned in this chapter.

## **5.2 Conclusion**

Nepalese economy is characterized by three kinds of macroeconomic imbalances viz. -saving - investment gap, export - import gap, revenue - expenditure gap. These fundamental gaps represent the foreign dominance in Nepalese economy. While saving - investment and revenue - expenditure gap are mainly the consequence of excess government activities in economic matters. To fill up these gaps public debt in the form of either internal or external is inevitable. The volume of external debt is

excessively rising in the recent years under liberalization policy, as globalization concept is wide spreading all over the world, aid is gradually decreasing and emphasis goes on loans, technology transfers and trade which have created high degree of indebtedness and, consequently debt servicing obligations are increasing. In the meanwhile, the loan is not self liquidating i.e., the debt repayment capacity is not increasing in the same pace. During the study period, average annual growth rate of GDP, revenue and export earnings are out stepped by annual growth rate of debt and debt servicing obligations.

Nepal's experience in public debt is found fairly recent one in comparison to other developed countries but the volume of public debt has been found to be increasing very fast. The public debt was introduced in 1962 and after 39 years of its use, i.e., in 2001 the outstanding of debt has stood at Rs. 260448 million and after 7 years, i.e., in 2008 it has reached at Rs. 327440 million. It has exhibited that the level of debt has been jumped up by 1.5 times within the study period. While observing the annual growth rates of public debt, it has been found that the total debt has increased on an average 3.45 percent per annum, external debt on an average 1.26 percent and internal debt on an average 9.41 percent per annum within the study period of 8 years. Study has revealed that the major component of public debt has been the external debt throughout the study period and it has been increasing in the lower rate than that of internal debt. On the other side, the growth rate of internal debt is increasing faster rate than that the growth rate of GDP and external debt as well. The GDP has increased by merely on an average of 3.35 percent per annum within the study period but internal debt is increasing on an average of 9.41 percent per annum. Therefore, there is mismatch between the growth rate of GDP with internal debt, external debt and total debt in Nepal.

Debt financing creates a room for the domestic borrowings. While analyzing the internal debt management and compositions of internal borrowing, it has been found that there are currently Rve types of instruments used to mobilize the domestic debt in Nepal. They are T-bills, development bonds, national saving certificates, citizen saving certificates and special bonds. The structure of domestic debt has great implications on macroeconomic stability and growth via interest rate effects.

In the structure of internal debt instrument under the study period, there is a drastic change between short term and long term instruments in the market. Treasury bill is considered as a short term instrument and all other bonds as long and medium term instruments. In FY 2000/01, the proportion of Treasury bill was 46 percent and all of other bonds 54 percent on total internal debt outstanding where as arriving at FY 2007/08, the Treasury bill alone has comprised 76.5 percent of total internal debt outstanding and the rest by other instruments. This situation has revealed that on the one hand the government is exposed to the frequent changes in the market interest rate and the other hand it is also bearing the higher roll over risk than before.

While analyzing the pattern of ownership on the internal debt instrument by segregating the holders into NRB, Commercial banks, Financial institutions and Others a change has been observed within the study period. The NRB was holding 29 percent of total debt instruments In FY 2000/01, which has come down to 16 percent in 2007/08. Similarly, the holding of commercial banks was 42.39 percent in FY 2000/01, which has increased to 66.29 percent in FY 2007/08. Despite the efforts made to raise the participation of general public on public debt, the government's efforts have not been successful.

This study has analyzed the impact of increasing trend of government borrowing on economic growth. High public debt is a cause for concern in Nepal. The public debt ratio is 63 percent of GDP. If it keeps up growing very fast in the years to come, not only will the high level of public debt raise the risk of a fiscal crisis, but it also will impose costs on the economy by keeping borrowing costs high, discouraging private investment, and constraining the flexibility of fiscal policy.

It has been observed that the debt to GDP ratios is increasing very fast. To maintain the debt sustainability for increasing debt to GDP ratios, the necessary conditions and sufficient conditions should be favorable, the growth rate of debt is higher than the growth rate of nominal GDP, This situation has reflected that the growth of debt is not sustainable for the economy. If the necessary conditions are not favorable than the sufficient condition, should be favorable to achieve the debt sustainability. For this the government should be able to maintain adequate primary surplus for additional debt servicing. Analysis of sufficient condition has revealed that government is not in

a position to generate adequate primary surplus to serve the debt since last few years.

The analysis in this study suggests that, historically, our economy has not generated enough primary budget surpluses to ensure the sustainability of the country's public debt. In 2007/08 total debt servicing stood at Rs. 22761 million while primary budget surplus was Rs. 14969 million. The inability to generate adequate primary surpluses appears to stem from the characteristics of the fiscal systems: governments has weak revenue bases (with lower yields and higher volatility) and .are less effective at controlling expenditures.

Therefore, it can be concluded that the level of debt is not sustainable in Nepal and government should reorient its borrowing policies for the future.

### **5.3 Recommendations**

On the basis of the study, following recommendations are proposed which can help to address the problem of public debt in Nepal.

- Government should maintain fiscal balance and strong fiscal discipline through control of unproductive expenditure and maximizing revenue mobilization. Governments efforts should be directed towards mobilizing internal resource and thus to reduce dependency on loans for financing development expenditure.
- To strengthen and broaden the tax base are needed so that governments have access to higher and less variable revenues. Effective tax rates in Nepal is generally low, suggesting that tax avoidance through either legal or illegal means and weak tax administration are serious issues that need to be addressed. The size of overall budgetary deficit has remained high mainly due to low revenue and very high expenditure. This has lead to heavy borrowing from internal and external sources. So, for reducing the volume of borrowing revenue collection is to be increased substantially in order to attain self-sufficiency in the long-run. This can be done by improving effective tax policy and tax administration. This also includes simplification of tax rates, rationalization of tax structure and expansion of tax base.
- To manage the government borrowing efficiently, development of an efficient

government security market is a must. The borrowing should be invested in the productive sector. The financial return to government out of these investments should be greater than the cost. The assets created out of such borrowing (yield) should be at the higher level. The borrowing cost and return should be widened every time. The objective of borrowing should not be for making easy money for the government. If the return is less than the borrowing cost, this will result in the gradual deterioration in the paying capacity of HMG and finally the public will have less confidence on HMG.

- The borrowing instruments can be used for maintaining monetary balance as well as for HMG's financing. So, there should be a cordial coordination between fiscal and monetary policy maker and debt manager. They should share their common interests to attain both the goals. The borrowing should not be for the payment of interest and principal amount. It should be invested in the productive sector so that return from such investment will be sufficient for repayment. Hence, an efficient monitoring mechanism should be developed. While the quantitative increase in the domestic borrowing is not that important, the meaningful use of such borrowing is more crucial.
- The size of the fiscal deficit that affects the size of internal borrowing is increasing every year. Hence, for the development of the government securities market, an efficient management system should be established. The following areas have to be developed and strengthened in the future:
- Networking: Net working will make the communication and sharing of the information easy. For this, at least we need to go for the Local Area Network (LAN) or City Area Network (CAN) immediately.
- Improvement in the debt recording system: There are no consolidated debt records available in Nepal. Different organizations are involved in the debt management. Domestic debt is managed by the NRB, and external debt is managed by the Ministry of Finance and Financial Comptroller Office. The payment part is solely taken care of by the Financial Comptroller Office. However, these organizations are found to be working without any close cooperation. So, to have an efficient and consolidated data recording, a need-based and a user friendly debt management recording software is a prerequisite.

- Development of security market: The primary and secondary market functions of government securities are done by the NRB in Nepal, though there are some market makers undertaking a limited function on government securities. These market makers are mostly concentrated in the Kathmandu valley. As a result, the market facilities are not yet well spread throughout the country.
- The policy is underway for trading and listing of the government securities through security exchange market. By trading the government securities in the security exchange market, the investors will be certainly benefited and trading will be on the basis of market demand and supply. Trading will reflect the real market situation. The securities will be traded on premiums, discount or par value. But maintaining the investors' confidence is a must for the well-functioning of the security markets. Before going to real trading on the security markets, there should be wide trading network, good infrastructure, efficient manpower, transparent floor trading system and settlement. Otherwise, the impact will not be as expected.
- A higher-level debt policy coordination committee: As this high level apex committee will be responsible for the national debt strategy and debt policy, there should be a provision of such central committee for the policy formulation and effective implementation.
- Monitoring mechanism: It is widely accepted that the borrowing amount should not be used in non-productive sectors like regular expenditure of the government, buying for arms and ammunition. Otherwise, the situation would be like "debt for debt payment" which will lead to a debt trap. Thus, there should be a monitoring mechanism for the borrowed money.
- The NRB can also work together with the government to introduce up-to-date technology in the government debt securities market. Such technological developments would be to introduce a book-entry (scruples) system to record security ownership and a simultaneous delivery-versus-payment procedure through the central bank's deposit accounts as the central depository.
- To have a clear separation between monetary and fiscal policies, it is most desirable that all the government debt securities should be issued through the auctions. The non-interest bearing and non marketable government debt securities should also be paid by the government or made marketable with

market-oriented coupon to avoid any potential conflict between debt management and monetary policy needs. The timely initiation of planned auction of long-term government securities would also help to develop a competitive and deregulated market system. This also avoids pressure on the NRB to facilitate primary market issues at a predetermined rate.

- Governments need to be able to demonstrate that their- overall debt burden is manageable, and that it is likely to remain so under most circumstances. Building this credibility requires not only the implementation of effective fiscal reforms, but also a record of adhering to these reforms through upturns and downturns. The strengthening of fiscal institutions has a very important role to play in this regard. Fiscal rules broadly defined as a permanent constraint on fiscal performance in some cases may play a useful role in strengthening fiscal policy credibility if appropriately designed and obeyed.
- The experience of many countries in recent years has shown that the recognition of contingent and implicit liabilities can significantly add to public debt and quickly raise questions about sustainability. Governments need to be fully aware of the contingent and implicit liabilities they face in this regard, improving fiscal transparency would help and act to reduce them to the extent possible, Improving financial sector supervision is an essential step toward this goal. More generally, the mechanisms for the restructuring of sovereign debt also need to be strengthened. To this end, current efforts to promote the inclusion of collective action clauses in debt contracts and, more generally, to find ways to improve arrangements for sovereign debt restructuring within the existing legal framework are important.
- The government should try to mobilize the internal resource at maximum level for development purpose through internal source and excessive dependency upon foreign assistance must be minimized by encouraging the domestic capitalist.
- The government should emphasize on grant amount more and more, whatever they are through bilaterally or multi-laterally- The government policies should reform for grant collection. On the condition of foreign aid, aid is unutilized

creating additional burden of debt servicing; the absorptive capacity of the foreign loan should be increased. The borrowed fund is to be spent on the promotion of exportable commodities on the short period.

- Nepal has very loose monitoring, inspection and evaluation towards the progress and operation of newly launched projects. This is why foreign lender and donors always use their own management for the projects conducted with their financial and technical co-operation. It leads to return most part of aid to their own country. Regular reviewing, monitoring of project must be made.
- Privatization of government enterprises should be accelerated and the revenue received from privatization should be utilized as the debt-equity-swap strategy for debt relief.
- Developing country like Nepal where private sector is still underdeveloped, the role of government is dominating in all sectors of the economy. Thus the government should maintain balance between urban and rural sector of the country. Similarly government should maintain balance between agriculture and trade sectors of the country, so the economy will be capable in a self-sustaining growth path.
- Viewing increasing indebtedness of public debt, mainly external outstanding debt government should increase its debt servicing capacity by increasing GDP growth (increasing its share of GDP) and export earnings. Here growth rate of national outstanding debt, debt servicing obligations, GDP, revenue and export earnings must go together in a sustainable path so that country will not be trapped by debt servicing problem.
- The policy to discourage capital flight should be developed and conducive environment need to be made for foreign direct Investment to accelerate national development and at last, proper attention should be given to the macro-economic stability of the country while accepting external loans.

## APPENDIX I

### Calculation of Growth rate of Deficit/Surplus of revenue over expenditure In million

Fiscal Year	Deficit/ Surplus of revenue over expenditure	Growth rate
2000/01	(24,188.10)	-
2001/02	(22,940.70)	-5.2%
2002/03	(16,437.20)	-28.3%
2003/04	(15,828.20)	-3.71%
2004/05	(18,046.50)	14.01%
2005/06	(24,779.60)	37.31%
2006/07	(45,892.60)	85.20%
2007/08	(55,766.40)	21.52%

Growth Rate = (Previous Year – Current Year) / Previous Year

$$= \{(22,940.70) - (24,188.10)\} / (24,188.10)$$

$$= -5.2\%$$

Similarly, growth rates of remaining years are calculated as above.

Average Growth Rate = Sum of Growth Rate/ No of Periods

$$= 120.8 / 7$$

$$= 17.26\%$$

## APPENDIX 2

### Calculation of Growth Rate of Financing from External Debt

In million

Fiscal Year	Financing from External Debt	Growth Rate
2000/01	12,044.00	0.0%
2001/02	7,698.70	-36.1%
2002/03	4,546.40	-41%
2003/04	7,629.00	67.8%
2004/05	9,266.10	21.5%
2005/06	8,214.30	-11.4%
2006/07	10,053.50	22.4%
2007/08	11,325.40	12.65%

Growth Rate = (Previous Year – Current Year) / Previous Year

$$= \{7,698.70 - 12,044.00\} / 12,044.00$$

$$= -36.10\%$$

Similarly, growth rates of remaining years are calculated as above.

Average Growth Rate = Sum of Growth Rate/ No of Periods

$$= 35.90/7$$

$$= 5.1\%$$

### APPENDIX 3

#### Calculation of Growth Rate of Financing from Internal Debt

In million

<b>Fiscal Year</b>	<b>Financing from Internal Debt</b>	<b>Growth Rate</b>
2000/01	7,000.00	-
2001/02	8,000.00	14.29%
2002/03	8,880.00	11.00%
2003/04	5,607.80	-36.85%
2004/05	8,938.10	59.39%
2005/06	11,834.20	32.40%
2006/07	17,892.30	51.19%
2007/08	20,500.00	14.57%

Growth Rate = (Previous Year – Current Year) / Previous Year

$$= \{8,000.00 - 7,000.00\} / 7,000.00$$

$$= 14.29\%$$

Similarly, growth rates of remaining years are calculated as above.

Average Growth Rate = Sum of Growth Rate/ No of Periods

$$= 145.99 / 7$$

$$= 20.86\%$$

## APPENDIX 4

### Calculation of Growth Rate of Financing from External Debt

In million

Fiscal Year	Total Debt	Growth Rate
2000/01	19,044.2	-
2001/02	15,698.7	-17.57%
2002/03	13,426.4	-14.47%
2003/04	13,236.8	-1.41%
2004/05	18,204.2	37.53%
2005/06	20,048.5	10.13%
2006/07	27,945.8	39.39%
2007/08	31,825.4	13.88%

Growth Rate = (Previous Year – Current Year) / Previous Year

$$= \{15,698.70 - 19,044.20\} / 19,044.20$$

$$= -17.57\%$$

Similarly, growth rates of remaining years are calculated as above.

Average Growth Rate = Sum of Growth Rate/ No of Periods

$$= 67.78/7$$

$$= 9.64\%$$

## APPENDIX 5

### Calculation of Growth Rate of Financing from External Debt

In million

Fiscal Year	GDP	Growth Rate
2000/01	413,428	-
2001/02	414,092	0.16%
2002/03	429,699	3.76%
2003/04	448,654	4.41%
2004/05	461,452	2.85%
2005/06	480,409	4.1%
2006/07	492,812	2.58%
2007/08	520,212	5.56%

Growth Rate = (Previous Year – Current Year) / Previous Year

$$= \{414,092 - 413,428\} / 413,428$$

$$= 0.16\%$$

Similarly, growth rates of remaining years are calculated as above.

Average Growth Rate = Sum of Growth Rate/ No of Periods

$$= 23.42/7$$

$$= 3.35\%$$

## BIBLIOGRAPHY

### Books:

- Adhikari, Chandra Mani (Prof.Dr.) (2061). *Public Finance in Nepal: Revenue and Tax Policy, Administration and organization*, Kathmandu Pairaibi publication,
- Andley, K.K. (1998). *Public Finance Theory and Practice*, New Delhi: S. Chand and Company Ltd.
- Dahal, Prakash, and Dahal, Bishwarup (2064). *Public Administration, Principle and Practice*, Kathmandu: Pinakal publication Pvt. Ltd.
- Dangi, Damberjang. (2062) *Public Policy Analysis*. Kathmandu: Dhaulagiri publisher
- Kohn, M. (1999) *Financial Institutions and Markets*, New Delhi: Tata McGraw Hill Publishing Co. Ltd.
- Lekhi, R.K.(2005) *Public Finance*, New Delhi: Kalyani Publishers.
- Me Vaish and HS Agrawal (1992) *Public Finance (Fifth Edition)*, Delhi: Willy Eastern Ltd.
- Rose Peter S., Money And Capital Markets, Richards D. Irwin (1997), *A times Mirror Higher Secondary Group*, New York: Inc. Company.
- Shreshta, Manohar K. and Dipak B. Bhandary (2004), *Financial Markets and Institutions*, Kathmandu: Asmita Books and Publishers & Distributors.
- Shrestha, Manohar K. and Dipak B. Bhandary (2007), *Financial Markets and Institutions*, Kathmandu: Asmita Books and Publishers & Distributors.
- Taylor, Philip E. (1971) *The Economic of Public Finance*, New York: McMillan co.
- Thapa, Balaram (2060/61), *Revenue Policy and Revenue Administration*, Kathmandu, Bauddik Sansar publication.

### Thesis

- Acharya, S.R. (2003) *Trend and Structure of Public Debt Situation in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Bista.Govinda (1986), *Government Finance in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Ghimire, R.R.,(2004) *A Study on Problems and Prospects of Government Debt in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Joshi, M.R. (1982), *Structure of Public Debt in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Khatiwada, Y.R. (1998), *Public Debt Management and Macroeconomic Stability*,

- Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Kunwar, K.B, (2002) *Government Borrowing System and Practice in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Pantha, B.M. (2006) *Public Debt in Nepal; A Critical Analysis of Debt Management*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Raut, S. (2007) *Rote of public Debt in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Sharma, B.P. (1987), *Burden of Public Debt in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.
- Singh, R.D.,(1963) *A Study on the Impact of Internal Borrowing in Nepal*, Kirtipur: Unpublished Master's Degree Thesis, T.U.

### **Journal & Others:**

- Aiamgir, M. and S. Ra (2005), *Nepal Public Debt Sustainability Analysis*, NRM Working Series No.5, Asian Development Bank, Kathmandu.
- Bhatta Gunakar, (2003) *An Assessment of the Impact of External Debt on Economic Growth of Nepal*, Nepal Rastra Bank, Kathmandu.
- Dahal, Madan Kumar, (2000), *Development Challenges for Nepal*, NEFAS, Kathmandu.
- Ghimire, Ramesh (2006) "*Overview of Monetary Policy in the Nepalese context*" in The Economic Journal of Nepal, No. 113. T.U, Central Economics Department.
- Ministry of Finance, *Economic Survey*, MOF, Nepal, 2007/08,
- Ministry of Finance, HMG/N, (2005) *Asian Development Bank, Managing Public Debt in Nepal*, Kathmandu.
- National Planning Commission (NPC), (2007-10) *Economic Plans, Kathmandu, Nepal, first Five Year Plan (1956-61) - Three Year Interim Plan*.
- Nepal Rastra Bank, *Economic Report 2007/08*, Kathmandu, Nepal.
- Reserve Bank of Staff College,(2000) *Paper for Program on Internal Debt Management*, Visnwa Prakashan Chennai, India.