PUBLIC DEBT IN NEPAL: AN ANALYSIS OF THE ISSUE OF GROWING TREND

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Summitted By:

Ramila Shrestha

Roll Number: 314/068

Regd. Number: 7-2-22-1546-2006

CENTRAL DEPARTMENT OF ECONOMICS

TRIBHUVAN UNIVERSITY

Kirtipur, Kathamandu, Nepal

LETTER OF RECOMMENDATION

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This thesis entitled **Public Debt in Nepal: An Analysis of the Issue of Growing Trend** has been completed by Ms. Ramila Shrestha under my supervision and guidance. I recommend it with approval for viva-voce.

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Prof. Dr. Sohan Kumar Karna
Thesis Supervisor

Date: 2075/01/19
2018/05/02

APPROVAL SHEET

The thesis entitled **Public Debt in Nepal: An Analysis of the Issue of Growing Trend,** submitted by Ms. Ramila Shrestha has been accepted as a partial fulfillment of the requirements for the Degree of Master of Arts in Economics.

Thesis Committee

Chairman

____
Prof. Dr. Kushum Shakya

External Examiner

____
Dr. R.D. Singh

Thesis Supervisor

____
Prof. Dr. Sohan Kumar Karna

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Despite my utmost care and efforts, I bear the full responsibility for any errors and discrepancies that might have occurred in this study report.

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Ramila Shrestha

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ABBREVIATIONS

AAGR	Annual Average Growth Rate
AD	Anno Domini
ADB	Asian Development Bank
BS	Bikram Sambat
CEDECON	Central Department of Economics
CEMID	Center for Empowerment Innovation and Development
CPI	Consumer Price Index
CSB	Citizen Savings Bond
DB	Development Bond
ED	External Debt
FGCO	Financial Government Comptroller Office
FY	Fiscal Year
GDP	Gross Domestic Product
GoN	Government of Nepal
IBRD	International Bank for Reconstruction and Development
ID	Internal Debt
IDA	International Development Association
IECCD	International Economic Cooperation Coordination Division
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IMF	International Monetary Fund
LDC	Least Developed Country
MoF	Ministry of Finance
NRB	Nepal Rastra Bank
NSC	National Savings Bond
OMOC	Open Market Operation Committee
PDMD	Public Debt Management Department
SB	Special Bonds
SPSS	Statistical Package for Social Science
TB/S	Treasury Bill/s
TD	Total Debt
UNDP	United Nations Development Programme
US/A	United States/ of America
USSR	United Soviet Socialist Republic
WB	World Bank

CHAPTER 1
INTRODUCTION

1.1 Background

Nepal is a small landlocked country lying between two big economic powers of Asia: India and China, China in the north and India in the east, west and south with the open boarder. Geometrically the country has roughly a rectangular outline located between Latitude 26°22′ and 30°27'; and longitude between 80°4′ and 88° 12′, with average east-west axis is 885 km and north-south 193 km. The total area of the country is 147181 sq km (83% of hill and 17% of the flat terrain of Tarai).

Nepal is one of the richest countries in the world in terms of bio-diversity due to its unique geographical position and altitude variation. Agriculture is the main source of livelihood of the Nepalese. About 80% of the people are engaged in their sector. Government of a country gets income from two sources: government revenue and public debt. Government revenue is obtained with no obligation to pay it back. Public debt obtained with obligation to pay it back at some future date.

Generally, Public debt refers to loans raised by a government within or outside the country. It is one method of financing government operations. According to Samuelson (1964), "the accumulated amount what the government has borrowed to finance past deficit is called public debt". An internal debt is owned by a nation to its own citizens and it possesses no burden. An external debt is owned by a nation from foreigners and it is burdensome.

The persistent features of Nepal's public debt both internal and external have been increasing rapidly each year. The trend of external debt is increasing more rapidly in absolute term than internal debt. Since developing countries like Nepal always need foreign currencies to import many capital goods required for development these countries have to depend more on external borrowing than internal for favorable balance of payment, maintaining the availability of foreign exchange and controlling the inflation.

Government of Nepal also started to collect fund through public debt to fulfill deficits and to invest in development projects internally from 1803 (Regmi, 1971) and externally from 1950.

1.2 Statement of the Problem

Nepal is facing the problem of financing ever increasing resource gap because government expenditure is increasing rapidly but government revenue is not increasing at the same pace. In Nepal both internal and external borrowings have been increasing rapidly each year. The external borrowing is increasing more rapidly than internal borrowings. Increasing trend of public borrowing, debt-servicing obligations are also increasing rapidly, but debt servicing capacity of the country has not been increasing with the same pace. In this context, Nepal is going to face debt crisis in the near future in which debt obligation will become major impediments to the balanced management of overall economy.

Nepalese economy is characterized by three kinds of macroeconomic-imbalances viz.-saving-investment gap, export-import gap, and revenue-expenditure gap. 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 there cent years under liberalized policy. As globalization concept is wide spreading all over the world, aid is gradually decreasing and emphasis is given on loans, technology transfer, and trade which have created high degree of indebtness, 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 ratio. So, ever increasing debt and debt servicing obligations will create a serious problem in the economy like "debt-trap", colonization, internal public instability etc. in short, these may appear macroeconomic imbalances which create excessive dependency upon foreign assistance. For this purpose, the study has made an attempt to identify the following problems:

1. What is the current trend of public debt in Nepal?
2. What are the existing problems of public debt?
3. What is the relationship between public debt and GDP in Nepal?

1.3 Objectives of the Study

The general objective of this thesis is to study public debt in Nepal with the following specific objectives:

1. To study the current trend of public debt in Nepal.
2. To examine the ratio of public debt to GDP and total budget of Nepal.

3. To explore the proper ways to use the debt in effective and efficient way along with reduction of the burden of debt.

1.4 Justification of the Study

Public debt is borrow from public to fulfill the gap of the government. It could be collected by government from internal and external source. It might or might be charge the interest rates and obligation to pay it back at some future date.

It is the modern intervention because it was not practice in middle ages. But today borrowing by the government is the common feature of government finance along with the other source of the public finance. In all the countries of the world, trend of public debt has been increasing.

Economic development is depends on the economic planning of the country. In economic planning, there are the various objectives to meet to have the economic development. Due to the low collection of the tax, public debt is essential to meet the objective of economic plans of the country. So, public debt has become a reliable and common instrument for resource mobilization to meet the government budget to invest in the development to have healthy GDP.

In the context of least developed country (LDC) like Nepal, government has to invest huge amount in development sector like socio-economic sector, productive sector, etc. For this government need a heavy budget to investment due to which the scope and importance of public debt has been increasing day by day.

Most of the studies have been concentrating on the examination of the structure, pattern and burden of the external debt in Nepal. So the research paper provides updated information of the study and also analyzes the effect of external debt on the output growth of Nepal.

So, this study will focus on the existing scenario of public debt, requirements of borrowing, trend and structure of public debt. So, this study will be beneficial not only for the readers like students and researchers but also for the future economic plans and policies. Hence its significance is obvious.

1.5 Limitations of the Study

The proposed study has the following limitation:-

1. This study covers only the time period between 2000/01 and 2015/16.
2. This study is mainly based on secondary data and information.
3. This study is does not attempt to examine the effect of public debt on other macroeconomic variables except GDP.
4. This study gives emphasis only on the trend and pattern of public debt in Nepal.

1.6 Organization of the Study

This thesis has been organized in five chapters. This (Chapter 1) is the introductory chapter that provided the background of the public debt in Nepal. It also indicated the statement of problem, objective of the study, justification of the study as well as limitation of the study.

Chapter 2 is about the literature surveyed for the study. It includes the theories of public debt, sources of debt, history the public debt in Nepal, relevant studies on national and international context. It also includes the analytical framework, variables and indicators for the study.

Chapter 3 deals with the methodology of the study. It indicates the research design, sources of data, data processing and description of the variables, regression equation and test of significance of the parameter estimates.

Chapter 4 is the section for data presentation and analysis. The collected data has been presented in tabular and graphical representation. Analysis is mainly done in frequency and percentage form.

Chapter 5, finally, includes the summary of the findings and provides some recommendation for future research concluding this thesis.

CHAPTER 2
Literature Review

2.1 Introduction

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

2.2 Theories of Public Debt

In this review, we mainly focus on the concept on public debt, its origin and history behind it, related legal and policies in Nepal and articles on the public debt.

2.2.1 Concept on Public Debt

According to Ghimire, Bist and Gurung (2012), Government of a country gets income from two sources: government revenue and public debt. Generally, public debt refers to loans raised by a government within or outside the country. Every government like individual has to borrow when its expenditure exceeds its revenue. But it is not a source of revenue like taxes.

Tax: revenue obtained with no obligation to pay it back.

Public debt: revenue obtained with obligation to pay back at some future date.

It is to be noted that public borrowing refers to the methods or processes of securing funds by the government. Public debt refers to the amount the government has an obligation to repay. Thus, public borrowing is a process; public debt is the outcome of that process. Public debts or loans are collected by the treasury or government from banks, institutions and individuals.

- **Why public debt?**

The following are the reasons on account of which a government might incur debt:

- Revenue need: when government expenditure exceeds government revenue, to avoid adverse effects of taxation and because the government's power to tax is no limited.

- Revenue need during emergencies (like war or natural calamities) when government cannot resort to taxation. It is the case of sudden spurt in government expenditure.
- Active role of government in under development countries for the development of the economy.
  - Case of deficit financing
  - Public debt as a source of deficit financing
- The resources that the government can mobilize from internal sources are not adequate (case of external borrowing).
- The government feels that the public should have less money in their hands (fiscal policy instrument).

- **Various Concepts of public debt**

The theories about public debt may be summarized under three heads:

- **Classical School**

Classical economists (economists of 18^{th} and 19^{th} century) were generally against public borrowing.

- Assume the existence of full employment; only voluntary unemployment exists
- No deficiency in aggregate demand exists (says law)
- Resources are better utilized by private sector than public sector
- Under fully employed economy, government can acquire resources by borrowing only at the cost of private sector where they are more fruitfully engaged.

So, Public Debt is a diversion of resources from private sector to less productive public sector. What the classical economists flavored was minimum public expenditure and between taxation and borrowing, they favored taxation for the following reasons:

- Public borrowing is an easy method of obtaining resources; governments are likely to be extravagant and irresponsible. Thus, public debt consequently becomes a burden in the future.
- Payment of interest and refunding of principal require additional taxation. This becomes difficult at a future date as government power to tax is not unlimited.
- Deficit financing may produce currency deterioration and price inflation.

However, classical economists were not against all types of public debt and approved public debt for productive. Musgrave called it ‘self-liquidating’, generally, those for investment on public enterprises or expenditure purposes that generates fund for debt serving as well as benefits the private sectors.

- **Keynesian View**

It was Keynes who effected a truly significant revision in the theory of public debt.

- Keynes rejected the classical notion of a free enterprise economy which is self-equilibrating at full employment level and emphasized the existence of underemployment equilibrium.
- Resources in the private sector may remain unemployed for relatively long periods if corrective or compensating action is not taken by the government.
- In the situation when resources are unemployed, transfer of idle, unemployed resources in the private sector to public sector does not deprive private sector of anything, instead it may raise aggregate demand output and employment (government expenditure multiplier)

Other Keynesian carried this view to the extreme and held that if debts are internally hold, they are merely a series of transfer, they cancel out for the economy as a whole and there is nothing to worry about the size. The only concern should be economic stability.

Hence, public borrowing need not necessarily be unproductive, inflationary and burdensome.

- **Modern View (Post Keynesian View)**

During World War II and in the post-war years, the size of public debt increased enormously, which caused some revision in economists’ thinking on the subject, public debt. However, they did not totally reject the classical notion. Borrowing does not always deprive the private sector from the use of productive resources i.e. in a period of widespread unemployment. Public debt is inflationary only during full employment.

- Later thinking does not even accept that borrowing in a period of full employment must be inflationary. It depends on the circumstances. If borrowing taps funds otherwise spent on consumption; it is not more inflationary than taxation.
- Public debt imposes real burden only during full employment. A large public debt, if internally held, poses many problems for the economy. It complicates monetary policy and creates difficulties of management.

- Economists agree that a distinction should be made between internal and external borrowing (debt). Internal borrowing is a financial need and simply the transfer of payments. Internal debt involves a series of transfer payments on the form of taxes and debt service payments and for the economy as a whole they cancel out.
- Many economists agree that borrowing constitutes burden for future. But it is the external borrowing which imposes a real burden. However, external borrowing gives the borrowing country command over more goods than it is currently producing.
- Internal debt, if used for financing of government consumption expenditure, will cause a curtailment of national saving and investment. It is because domestic borrowing is a use of national saving and the act of borrowing by the government makes it unavailable to private entrepreneurs for private investment. On the other, if the borrowed money is used to finance public investment, it will cause no such reduction (of national saving and investment).

- **Sources of debt**

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

a. Internal Sources of Government Borrowing

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

Instruments Used for Internal Borrowing

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

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

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

- **Bond:** Long-term securities are issued as per the issue calendar. The government of Nepal issues long-term securities such as development bond, national saving certificates and citizen saving certificates as stock or promissory note. For issuance of these bonds, the notice would be published in the daily newspaper by mentioning the special feature like type of bonds, interest rate, maturity period, time limit, procedure and required conditions. The types of bonds issued are described below.
- **Development Bond**: The development bonds have been issued in face value at pre-determined interest rate. A notice would be published in the newspaper by mentioning the special features, like type of bonds, amount interest rate and issue date, taxable/nontaxable condition, application time limit and others. This information would also be released in the central bank website. These instruments generally issued for 5 years or more than 5 years maturity period for financing the development projects having long gestation period.
- **Special Bond:** These are conditional promise to pay a specific sum of loan on specific dates. These instruments are specially issued in the case of short position in the government case flow. These days the special bonds are issued for the duty drawback settlement.
- **National saving certificate and citizen saving certificates**: Generally, these are non-marketable and tax exempted debt instruments usually issued for the public (Household sector). However national saving certificate and citizen saving certificate in Nepal are makeable as well as taxable securities as the moment. These certificates are sold in face value

with pre-determined interest rate for this issuance of the certificates the notice would be published in the newspaper focusing the necessary terms and conditions.

b. External Sources of Government Borrowing

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

i) International financial institutions like IMF, IBRD, IDA and IFC: These institutions give loans to member countries for the short –term period covering temporary balance of payments difficulties and for long-term for development projects.

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

2.2.2 History of public debt in Nepal

In the Nepalese economic history, public debt is not so old. In history text books there are discrete reference to great king Prithivi Narayan Shah, raising revenue and even borrowing from the public for the purpose of unifying the kingdom of Nepal. But the information in terms of debt and amount of borrowing is missing in those references. Even Chandra Shamser is reported to have borrowed money from Pashupati Nath temple to resettle the emancipated slaves around A.D. 1925.

Regmi (1971) has written in his book Nepalese economic history that there was no public debt but the government provided some regulation to maintain public finance before 18th century. Some instances of public debt in Nepal can be seen existed in the period of RanaBahadur Shah who borrowed a large amount of fund from Indian merchants. At the same time in 1803 government had taken borrowing for internal finance (Regmi, 1971).

In Nepal government obtained external debt from 1963/64 and internal debt from 1964. In fiscal year 1963/64 the government took debt for the mobilization of saving and to finance the country's economic development program. So, systematic internal debt services have been found out from 1964 in the budgetary provision of Nepal government. Mainly in the Nepalese context, it is budgetary development that precisely governs the size and composition of public debt.

Evolution of budgetary development in Nepal is a factor to increase in government expenditure, which pushed government borrowing. Until 1975, public expenditure amounted 11 percent of GDP. In 1980's there was heavy increase in public expenditure from 1990's onwards expenditure had exceeded one fifth of GDP. Revenue remained around 9 percent of GDP till 1993. Another interesting feature of Nepalese budgetary development has increasing magnitude of regular expenditure to compare with that part of development expenditure, particularly in the 1990's.

Foreign aid consists of both grants and loans. Nepal has been receiving foreign aid since 1951. The first donor country was USA. It flows under point four agreements for technical co-operation in January 23, 1951. Then first Indian aid in 1951/52 for the construction of Tribhuvan International Airport. Now-a-days several countries are providing foreign aid in the form of grants and loans. Basically higher proportion of grants is receiving through the bilateral sources and most part of loans is receiving through the multilateral sources.

Foreign aid has been entirely in grants upto 1960/61. Then after this the share of grants has been declining but still it continued to account for a large proportion of total aid (more than 50 percent upto 1982/83). The share of loan in total aid started to increase since 1983/84. Nowadays government is receiving foreign aid to meet the regular government expenditure too.

In 1999/2000 the share of loan in total aid was eighty percent. In fiscal year 2001/02 Nepal received Rs. 14384.8 million total foreign aid through bilateral and multilateral sources. In which Rs. 6686.2 million and Rs. 7698.6 million were grants and loans respectively. Till now, the amount of grants is higher but the increasing trend of grants is lower as compared to loans. All these information show that the burden of public debt of Nepal is increasing due to growing share of foreign loans. So, public debt is increasing at faster rate.

2.3 Relevant Studies

2.3.1 International Context

Modigliani (1961) refining contributions by Buchanan (1958) and Meade (1958), argued that the national debt is a burden for next generations, which comes in the form of a reduced flow of income from a lower stock of private capital. Apart from a direct crowding-out effect, he also pointed out to the impact on long-term interest rates, possibly in a non-linear form "if the government operation is of sizable proportions it may significantly drive up [long-term] interest rates since the reduction of private capital will tend to increase its marginal product" (p. 739). Even when the national debt is generated as a counter-cyclical measure and "in spite of the easiest possible monetary policy with the whole structure of interest rates reduced to its lowest feasible level" (p. 753), the debt increase will generally not be costless for future generations despite being advantageous to the current generation. Modigliani considered that a situation in which the gross burden of national debt may be offset in part or in total is when debt finances government expenditure that could contribute to the real income of future generations, such as productive public capital formation.

Diamond (1965) adds the effect of taxes on the capital stock and differentiates between public external and internal debt. He concludes that, through the impact of taxes needed to finance the interest payments, both types of public debt reduce the available lifetime consumption of taxpayers, as well as their saving, and thus the capital stock. In addition, he contends that internal debt can produce a further reduction in the capital stock arising from the substitution of government debt for physical capital in individual portfolios.

Adam and Bevan (2005) find interaction effects between deficits and debt stocks, with high debt stocks exacerbating the adverse consequences of high deficits. In a simple theoretical model integrating the government budget constraint and debt financing, they find that an increase in productive government expenditure, financed out of a rise in the tax rate, will be growth-enhancing only if the level of (domestic) public debt is sufficiently low.

Saint-Paul (1992) analyzed the impact of fiscal policy by the level of public debt, in endogenous growth models and found a negative relation as well.

Checherita and Rother (2010) had analyzed and found the evidence for a non-linear impact of public debt on per-capita GDP growth rate across twelve euro area countries over a long period of time starting in 1970. It unveils a concave (inverted U-shape) relationship between the public debt and the economic growth rate with the debt turning point at about 90-100 percent of GDP. This means that a higher public debt-to-GDP ratio is associated, on average, with lower long-term growth rates at debt levels above the range of 90-100 percent of GDP. The long-term perspective is reinforced by the evidence of a similar impact of the public debt on the potential/trend GDP growth rate. From an econometric perspective, the paper deals with the potential endogeneity problem, in particular with the issue of simultaneity or reverse causation, in various ways including: (i) using 1-year and 5-year forward growth rates, as well as the potential and trend GDP growth rates, to mitigate/eliminate the impact of the economic cycle; (ii) using a quadratic relationship in debt, while the linear one (which would be implied by the converse relation, i.e. lower economic growth induces, ceteris paribus, a higher debt-to-GDP ratio) is not found to be significant; (iii) using instrumental variable estimation models.

The public debt threshold of 90-100 percent of GDP is an average for the (12-country) euro area and its statistical confidence may go as low as 70 percent of GDP. This suggests that for many countries current debt levels already may have a detrimental impact on GDP growth, given that the euro area average debt-to-GDP ratio (estimated to increase from 78.7 percent in 2009 to 88.5 percent in 2011) is already above the lower threshold. This evidence constitutes an additional warning signal for policy-makers (this time from a long-term growth perspective).

Annual changes in the debt level (first difference of the debt ratio) are also found to be negatively associated with annual economic growth rate.

The channels through which public debt is likely to have an impact on economic growth rate seem to be private saving, public investment, total factor productivity, and sovereign long term nominal and real interest rates.

The question remains whether public debt is indeed associated with higher growth below the 90-100 percent turning point. This is a relevant issue even in view of the additional evidence in this analysis, showing that the debt turning points for the first two channels (private saving and public investment) seem to be much below the range of 90-100 percent. A possible explanation for a positive impact of higher debt (i.e. accumulated past deficits) on growth would be if those deficits were used to finance productive public investment. However, empirically, a large part of the debt increases of the past decades are related to higher public consumption and transfers. Taking this into account, a potential link could lie in the extent of past absorption of adverse exogenous shocks by governments, which were not compensated by debt-reducing measures afterwards. If such shocks result in a lower growth potential, their absorption via higher deficits may arguably provide an explanation of the above results.

Yet, government budget deficits are found to be linearly and negatively associated with the growth rate of both real and potential output. The fact that the change in the debt ratio and the budget deficits are linearly and negatively associated with growth (and with the long-term interest rates) may point to a more detrimental impact of the public debt stock even below the threshold. Hence, targeting a higher debt level to support growth is not a policy option. Any policy with such a target would reduce the leeway of governments before the debt burden has an unmistakably adverse growth impact.

In the current economic environment, the results represent an additional argument in favour of swiftly implementing ambitious strategies for debt reduction. If policy makers let high debt ratios linger for fear that fiscal consolidation measures will be unpopular with voters, this will undermine growth prospects and thus will put an additional burden on fiscal sustainability. This debt-based argument thus adds to the positive growth effects of fiscal deficit reduction found in the literature for the long term and frequently also in the short term.

It should be noted that the econometric results and the economic interpretation rest on the analysis of the long time period since 1970. Thus they apply to what could be broadly called “normal” economic times, some short-term disruptions in past decades notwithstanding. Recent fiscal and financial market developments for some countries carry characteristics of crisis situations which call for emergency policy responses. While, ideally, the long-term economic relationships established in the literature should provide the basis also for such short-term policy strategies, their value for concrete policy decisions may be more limited.

Krugman (1988) coins the term of “debt overhang” as a situation in which a country’s expected repayment ability on external debt falls below the contractual value of debt. He insisted that the theoretical model posits a non-linear impact of foreign borrowing on investment (as suggested by Clements et al. (2003), this relationship can be arguably extended to growth). Thus, up to a certain threshold, foreign debt accumulation can promote investment, while beyond such a point the debt overhang will start adding negative pressure on investors' willingness to provide capital.

In the same vein, the growth model proposed by Aschauer (2000), in which public capital has a non-linear impact on economic growth can be extended to cover the impact of public debt. Assuming that government debt is used at least partly to finance productive public capital, an increase in debt would have positive effects up to a certain threshold and negative effect beyond it.

The channels through which public debt can potentially affect economic growth are diverse. Meade (1958) was drawing attention to the fact that the removal of the "deadweight debt" would: (i) raise the incentive of households to save (the Pigou-effect) [10]; (ii) improve the incentives for work and enterprise; (iii) possibly allow for a decrease in income taxation at a later stage as a result of saving interest payments on the budget (improving even more the incentives for work and enterprise).

An important channel through which public debt accumulation can affect growth is that of long-term interest rates. Higher long-term interest rates, resulting from more debt-financed government budget deficits, can crowd-out private investment, thus dampening potential output growth. Indeed, if higher public financing needs push up sovereign debt yields, this may induce an increased net flow of funds out of the private sector into the public sector. This may lead to an increase in private interest rates and a decrease in private spending growth, both by households and firms (see Elmendorf and Mankiw, 1999). While the empirical findings on the relationship between public debt and long-term interest rates are diverse, a significant number of recent studies[11] suggest that high debt and deficits may contribute to rising sovereign long-term interest rates and yield spreads.

In Krugman's specification, the external debt overhang affects economic growth through private investment, as both domestic and foreign investors are deterred from supplying further capital. Other channels may be total factor productivity, as proposed in Pattillo et al. (2004), or increased uncertainty about future policy decisions, with a negative impact on investment and further on growth, as in Agenor and Montiel (1996) and in line with the literature of partly-irreversible decision making under uncertainty (Dixit and Pindyck, 1994).

The empirical evidence on the relationship between debt and growth is scarce and primarily focused on the role of external debt in developing countries.

Among more recent studies, several find support for a non-linear impact of external debt on growth, with deleterious effects only after a certain debt-to-GDP ratio threshold. Pattillo et al. (2002) use a large panel dataset of 93 developing countries over 1969-1998 and find that the impact of external debt on per-capita GDP growth is negative for net present value of debt levels above 35-40 percent of GDP. Clements et al. (2003) investigate the same relationship for a panel of 55 low-income countries over the period 1970-1999 and find that the turning point in the net present value of external debt is at around 20-25 percent of GDP. Other previous empirical studies that find a non-linear effect of external debt on growth include Smyth and Hsing (1995). On the other hand, Schclarek (2004) finds a linear negative impact of external debt on per-capita growth (and no evidence of an inverted U-shape relationship) in a panel of 59 developing countries over the period 1970-2002.

Schclarek (2004) had investigated the relationship between gross government debt and per capita GDP growth in developed countries. No robust evidence of a statistically significant relationship is found for a sample of 24 industrial countries with data averaged over seven 5- year periods between 1970 and 2002.12 In contrast, a recent study by Reinhart and Rogoff (2010), which analyses (through simple correlation statistics) the developments of public (gross central government) debt and the long-term real GDP growth rate in a sample of 20 developed countries over a period spanning about two centuries (1790 - 2009), finds that: (i) the relationship between government debt and long-term growth is weak for debt/GDP ratios below a threshold of 90 percent of GDP; (ii) above 90 percent, the median growth rate falls by one percent and the average by considerably more. A similar change in the behaviour of GDP growth in relation to the debt ratio is also found by Kumar and Woo (2010).

Sundharam and Andley (1988), public borrowing is considered very useful to remedy a depression. Many economists like Keynes have advocated increased public expenditure financed through borrowing and not through taxation, for while taxation will reduce incomes and demand still further, borrowing will have no such effect/ Besides, loans enable the government to make use of idle and unutilized funds of the public. Thus, there is a strong justification in favor of public borrowing to cure unemployment.

Pyakurel (2002) has suggested about effective use, reduction in aid dependency and quality enhancement, if no inability to enhance aid utilization can drag the country into the debt trap.

The growing trend of borrowing creates a great problem for debt management and has become a challenging issue for the country. The borrowing money is unlikely financed on the non-monetized and unproductive sectors of the economy which in turn has proved to be a burden for the country. The degree of indebtedness of the external debt has increased due to the poor mobilization of internal resources, widening investment saving gap, export import gap, revenue expenditure gap and large amount of fiscal deficit. So, there has been excessive flow of foreign loans to bridge up these gaps. Consequently, the burden of debt and debt servicing obligations are increasing every year but debt servicing capacity is not increasing in the same pace. The government borrowing has been financed mostly on unproductive sectors and that is why, the public debt and its interest are mounting rapidly. Thus, the debt should be properly utilized on productive sectors otherwise debt trap will drag us to the path of difficult situation.

2.3.2 National Context

Gurugharana (1996) has analyzed the burden of public debt as debt servicing cost in Nepal and concluded that "Although foreign loan is relatively much softer terms for Nepal compares to India and china, the very low rate of return and increasing share of loan in foreign aid imply that aid slowly pushing Nepal towards debt crisis in the coming years".

Public Debt Act, 2059 (2002) has delegated domestic debt management to Nepal Rastra Bank (NRB). On behalf of GON, Nepal Rastra Bank acts as the manager and regulator of domestic debt. Accordingly, MOF has been focusing on policy guidelines and external debt and while, NRB executes through its Open Market Operation Committee (OMOC) and Public Debt Management Department (PDMD) on issuing government domestic debt securities in the form of treasury bills and longer term bonds. While, external debt is managed by Ministry of Finance through FCGO.

Public debt outstanding stands at NPR 509.6 billion which comes to be 32.7 percent of GDP, of which external debt is NPR 308.1 billion (19.8 percent of GDP) and domestic borrowing is NPR 201.5 billion (12.9 percent of GDP) at the end of FY 2011/12. Special Drawing Rights dominates the currency composition (over 83 percent) which consequently bears a high degree of currency risk (e.g., loans from The World Bank, ADB and IFAD). During the last five years, the annual currency depreciation was 3 percent. The quantity of internal debt is relatively smaller compared to external borrowings. However, most of the external debt is in concessional rates whereas internal borrowing is normally at market rate. As a result repayment amount of internal debt is larger than that of external one making internal debt mobilization relatively expensive. During the last FY, share of domestic debt repayment was 34.9 percent and that of external debt was at 65.1 percent, whereas the share of interest amount in respect of domestic borrowing was 73.8 percent. Despite the rise in total debt service payments, service payments on external debt are still very manageable. For example, Nepal's ratio of external debt service to exports of goods and services is only around 4 to 5 percent and external debt service in relation to gross foreign exchange reserves of the country is only about 6 to 7 percent. Hence, the servicing of external debt is unlikely to be a problem in the near future from a balance of payments perspective. However, it could be a serious problem from a fiscal viewpoint, particularly if revenue growth were to slow down.

The Interim Constitution of Nepal, 2007 has made certain specific provisions on public debt issues, which are: Government shall not obtain any loan except in accordance with law; debt bill shall be considered as a fiscal bill; debt shall be incorporated into the Consolidated Fund; and debt liability shall be treated as a non-vote-able account. A new Public Debt Act of Nepal was promulgated in 2002 by replacing the previous one to facilitate the issuance of several government bonds for raising supplementary financial resources, especially for deficit financing. For external borrowings also, Government has set a maximum ceiling for loan and guarantee up to the upper limit as specified through amendments of Public Debt Act, 2002 and Loans and Securities Act, 1968 on a regular basis. This Act also contains provisions for borrowing authorization of external debt to the government in two ways - which are, authorization to borrow for development activities and authorization to guarantee for domestic entities. As specified in this Act, a Resource Committee comprising of the chairman of the National Planning Commission, the Governor of NRB and the Finance Secretary recommends the annual ceiling of external borrowings to meet the budget deficit for a particular fiscal year. This Act also states that agreements made by the Government of Nepal with donors and lenders for borrowings or guarantees will have to be tabled at the parliament.

This Act is supplemented through the Public Debt Regulations, 2002. These Act and Regulations have made provisions concerning institutional framework for domestic borrowing, modalities of domestic debt operations and actors of domestic borrowing. This Act has also authorized the Nepal Rastra Bank to perform the functions of domestic debt management on behalf of the Government of Nepal. Appropriation Acts to be enacted for every financial year will apportion the amount of expenditures which shall be funded through the domestic and external borrowings. Additionally, Nepal Rastra Bank Act, 2002 has also made provisions for extending credit/overdraft to Government not exceeding 5 percent of preceding fiscal year's revenue, which shall be repaid within 180 days.

According to Dumre (2008), Nepalese economy is characterized as three kinds of macroeconomic imbalances viz.-saving-investment gap, export-import gap and 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 merchandise export earnings are out stepped by annual growth rate of debt and debt servicing obligations.

The ultimate effect of lower capacity to debt servicing falls on capital formation and development process. Mismanagement of fund resulted on lack of self-liquidating projects. After the study, it can be concluded that Nepal has not really fallen into the debt trap but if the process continues for years, there will be no other result. Both the internal and external loans are in increasing trend but debt servicing amount is increasing annually and its growth rate is higher than GDP growth rate and revenue growth rate. Such condition suggests to better utilization of fund.

The analysis of this study reveals that there exist significant positive relationship between External Debt, Internal Debt and Total Debt with Gross Domestic Product (GDP). Higher external debt is associated with higher Domestic output and vice versa. The analysis of the effect of external debt on output reveals that there exist significant positive relationship between external debt and GDP. It is concluded that external debt in Nepal over the period 1989/90 to 2004/05 is some extent productive. Therefore it is necessary to have a careful look on the increasing magnitude of external debt and proper care must be taken to increase the debt servicing capacity of the country.

According to CEMID-Nepal (2012), till 1950 Nepal remained debt free. The first 90 days Treasury bills amounting to Rs. 7 million were issued on 1 percent coupon in 1962 and Nepal received first foreign loan in FY 1963/64. Thereafter, the foreign and domestic borrowings have become alternative means of debt financing. Many other domestic instruments by the name of Development Bond, Special Bond, National Saving Certificate and Citizen Investment Certificates were issued in 1964, 1971, 1983 and 2001 respectively. Nepal also started taking soft loans from multi-lateral agencies and also bi-laterally from friendly country (e.g., Australia, Austria, Belgium, France, Japan, Korea, Kuwait, then USSR, USA, etc.). Some of these loans were of mixed nature, i.e., commercial and tied loans.

As of now, Nepalese economy relies heavily both on short-term domestic debt and concessional foreign loans, particularly multi-lateral agencies like The World Bank, ADB, IFAD, etc., of long maturity. The outstanding domestic debt liability has totalled Rs. 201.5 billion in mid-July 2012 and external debt liability has reached Rs. 308.1 billion in the same period. Total Public Debt Liability as of mid-July 2012 stands at Rs. 509.6 billion. More than 65 percent of domestic debt has maturities of one year or shorter raising risk on account of higher short-term interest rates at the time of renewal, and less than 9 percent of domestic debt has maturities of 10 years or longer. Moreover, some bonds, such as Foreign Employment Bonds have been marginally subscribed resulting in the loss of government's credibility which in turn may increase the interest cost for the government. The bulk of the cheap foreign loans have maturities longer than 30 years and account for more than 57 percent of the financing of the budget deficits in Nepal. The high stock of debt, slow growth rate of economy and outflow of considerable amount of resources in the form of debt serving have raised questions that whether foreign borrowing on current terms is beneficial for developing economies, like Nepal. Therefore, debt management is increasingly important for the Nepalese economy.

According to Bhattarai (2013), the level of public debt is increasing in the Nepalese economy. The average growth rate of public debt is 18.86 percent. While talking about composition of public debt, the average share of external loan is greater than that of internal loan. However, in the latter period, the share of internal loan is significantly greater than that of external loan. The growth rate of economy seems to be relatively low. Low rate of economic growth and high rate of inflation is one major problem of the Nepalese economy. So, the efforts should be accelerating the growth rate so that more employment opportunities can be generated and income of the people can be increased. For this, those measures should be employed which increase the level of aggregate supply. For this, investment should be increased and use of new technology should be promoted. Efforts should equally be directed towards maintaining the price stability. As the study is based on the descriptive analysis, the cause and effect relationship between the variables could not be found. So, there is further scope to study such relationship between the abovementioned different variables.

Sharma (2014), with the development of the concept of welfare state, responsibilities of government have been increasing drastically. The social welfare functions are increasing gradually through international pressure too. Government should face budget deficit due to high expenditure and fewer revenues. Increasing taxes, printing money, domestic or external borrowings of using previous budget surplus are the sources of government revenue. But the expenditure on various economic activities and security is increasing rapidly as compare to national income. It is not possible to meet the increasing expenditure of the government only through revenue collection. Accumulated amount what the government has borrowed to finance past deficit is called public debt (Samuelson, 1964).

The classical economists were generally against borrowing and they favored the minimum role of the government. But after the great depression of 1930s, the government intervention in the economy increased due to the increase in public expense which promotes the public debt. Thus, the intervention of the government in the economy becomes an important tool. J.M. Keynes is in favour of government regulated economy that push government deficit. To meet the deficit, government needs to undertake the public debt which need not necessarily unproductive, inflationary and burdensome.

The structure of government finance in Nepal indicates the important role of public debt, both internal and external, in meeting resource gap. Public debt has been used in Nepal as a regular mechanism of deficit financing since last five decades, Nepalese economy depends heavily on short term domestic debt and on concessional foreign loans. More than 65 percent of domestic debt has maturities of one year or shorter. Nepalese economy receives concessional foreign loans particularly from multilateral agencies like the World Bank, ADB etc. These loans are of long maturities of more than 30 years and account for more than 57 percent of the financing of the budget deficit in Nepal.

The public borrowing for the productive purposes are considered as self-liquidating such debt liability will be repaid through the revenue generated on completion of such projects, while the unproductive debts are those which do not add to the productive capacity of the economy.

The trend of borrowing external debt is very in Nepal as compared to internal debt. Thus, particularly after 1970 the budgetary deficit has been increasing. So Nepal is facing a serious problem of financial resource gap on one hand and increasing population growth and inflation on another. If the trend of foreign debt goes on increasing like this, one day Nepal will be in the worse situation of debt trap. Heavily dependent into debt will be the challenge for the Nepalese economy. Gap between expenditure and revenue collection needs to be minimized for the fiscal balance. In this scenario, it is necessary to study about the trend and impact of public debt in economic development of Nepal.

According to the report of Nepal Rastra Bank (2014/15), a situation of fiscal deficit or deficit financing refers to a state wherein revenue collection of government including tax and foreign grants 31 together with other receipts is less than government expenditure. As expenditure of Nepal government is higher than its income, it has been facing the situation of budget deficit or deficit financing for quite a long time. In such a situation, the government manages funds to meet its expenditure either through the change in cash reserves or through domestic borrowings or loans from foreign countries and donor agencies, or any of these measures. Due to inability of Nepal Government to meet its expenditure from receipts of taxes, grants and principal repayment receipt, necessary amount for expenditure is garnered by using various instruments of financing including external and domestic borrowings.

Government of Nepal has been financing its budget deficit through domestic and external debt mobilization. In a situation where expenditure could not be met by raising debts, shortfall amount is funded through change in cash reserve. The net budget deficit which stood at Rs. 51.18 billion in fiscal year 2011/12 was borne through foreign debt of Rs. 11.08 billion, domestic borrowings of Rs. 36.41 billion and rest Rs. 3.68 billion through change in cash reserve. Though the budget deficit in fiscal year 2012/13 was Rs. 24.71 billion, government mobilized Rs. 31.01 billion through foreign and domestic borrowings. In fiscal year 2013/14, a sum of Rs. 41.11 billion was mobilized through foreign and domestic borrowings. Despite mobilization of foreign and domestic borrowings in fiscal year 2011/12 decreased by 8.2 and 14.3 percent respectively as compared to preceding fiscal year, foreign debt mobilization rose by 8 percent while domestic borrowings mobilization rose by 76.7 percent and 4.94 percent in fiscal year 2012/13. To meet the budget deficit of current fiscal year, government has aimed at raising Rs. 49.52 billion of foreign debt and Rs. 52.75 billion from domestic borrowing. This amount is higher by 148.5 percent than total debt raised in fiscal year 2013/14, 134.35 percent higher than foreign debt and 164 percent more than domestic borrowings.

The role of public debt is not only limited to financing fiscal deficit of the government. It has also played vital role in the construction of physical infrastructures and in public service delivery required for overall economic development of the country. Nonetheless, foreign and domestic debts that are accepted every year to finance fiscal deficit have further increased country's liability of outstanding domestic as well as foreign debt principal and interest payable thereon. There are several examples that most of the countries in the world have been facing a number of predicaments due to their inability to payback their loans on time. In this context, it is necessary to think for Nepal towards assessing risks inherent in public debts and managing them accordingly thereby assessing and containing the costs within a desirable limit.

IECCD Newsletter (2017) has mentioned that as of June 2017 of the current FY 2016/17, the new foreign aid commitment received by the GoN from DPs has reached the total of Rs. 234.94 billion (Rs. 57.8 billion as grant and Rs. 177.13 billion as loan) for the implementation of various development projects/programs. In the same period of previous fiscal year, the total commitment received by the GoN from various DPs had reached the total of Rs. 195.59 billion (Rs. 79.2 billion as grant and Rs. 116.39 billion as loan).

2.4 Research Gap

This study revealed that there has been limited studies in national context while comparing to international contexts .In international contexts, studies on developed countries in particular have focused to investigates the relationship between gross government debt and per capita GDP growth (for e.g. by Schclarek 2004), insisting no robust evidence of a statistically significant relationship for a sample of 24 industrial countries with data averaged over seven 5- year periods between 1970 and 2002.In contrast, a recent study by Reinhart and Rogoff (2010), analyses (through simple correlation statistics) the developments of public (gross central government) debt and the long-term real GDP growth rate in a sample of 20 developed countries over a period spanning about two centuries (1790 – 2009). Similarly, Checherita and Rother (2010) analyzed evidence for a non-linear impact of public debt on per-capita GDP growth rate across twelve euro area countries over a long period of time starting in 1970. Most studies were focused on comparative case studies.

In case of developing countries in international contexts, empirical studies particularly highlighted the relationship between debts and [economic] growth is scarce and primarily focused on the role of external debt in developing countries. For instance, Pattillo et al. (2002) use a large panel dataset of 93 developing countries over 1969-1998 and find that the impact of external debt on per-capita GDP growth is negative for net present value of debt levels above 35-40% of GDP. Clements et al. (2003) investigate the same relationship for a panel of 55 low-income countries over the period 1970-1999 and find that the turning point in the net present value of external debt is at around 20-25% of GDP. Other previous empirical studies that find a non-linear effect of external debt on growth include Smyth and Hsing (1995). On the other hand, Schclarek (2004) finds a linear negative impact of external debt on per-capita growth (and no evidence of an inverted U-shape relationship) in a panel of 59 developing countries over the period 1970-2002.

In national context, most research and studies were, basically, theory based. Very less empirical studies were encountered that particularly focused on recent scenario of public debt in Nepal. For example, Upadhyay (2008) analyzed the trend and pattern of government borrowing on economic development in which the empirical results confirm that stock of internal, external and total debt has not caused negative impact on GDP growth of Nepal. Dumre (2008) studied external debt in Nepal which revealed that there exist significant positive relationship between External Debt, Internal Debt and Total Debt with Gross Domestic Product (GDP). Higher external debt is associated with higher Domestic output and vice versa. The analysis of the effect of external debt on output revealed that there existed significant positive relationship between external debt and GDP. Dumre (2008) concluded that external debt in Nepal over the period 1989/90 to 2004/05 is some extent productive. However, a study highlighting the recent trends and pattern of public debt in Nepalese economy, that specially analyses the debt scenario of economy in a changing political scenario after Peoples movement-II[1], is still missing.

This study, thus, attempts to fill such missing space in debt analysis in Nepalese economy in recent context by taking the time reference since 2000/01. It attempts to analyse external as well as internal debt along with effects on GDP. Further, this study attempts to focus on existing problems and find out ways to use the debt in effective and efficient way.

[1] There was people's movement named as People Movement-II in Nepal in 2062/63 B.S. (2005), which established the Federal Democratic Republic of Nepal with changed economic reform plans.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Research Design

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

3.2 Sources of Data

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

3.3 Data processing

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

Simple calculation like ratio, percentage etc. is made with the help of ordinary calculator. SPSS (Statistical Package for Social Science), a computer application program and Excel are used to calculate and analyze the regression equation. It is also used for other mathematical calculation like annual growth rate, R^2, Adj. R^2, F-test, t-test, etc.

3.4 The Description of the Variables

- **Public Debt**: Total public debt includes an external obligation of a public debtors and the government.

- **Gross Domestic Product (GDP):** The total final output of goods and services produced by the country's economy, within the country's territory, by residents and non-residents, regardless of its allocation between domestic and foreign claims.
- **Debt Servicing:** The sum of interest and principal payment and repayment of interest on external public and publicity guaranteed debt.
- **Debt Service Ratio:** The ratio of interest and principal payments due in a year to export receipts for that year.
- **External Debt (ED):** It is the obligation of a country to foreign agency or government through bilateral and multilateral sources.
- **Internal Debt (ID):** Internal Debt refers to the public loan floated with in the country.
- **Export of Goods and Services:** It is the amount of goods and services sold to another country.
- **Debt -Trap:** The situation when a new fresh loan is used to repayment of interest.
- **Burden of Debt:** Burden of debt is the sacrifice of the community through a rise in taxation at the time of repayment and for paying for the annual interests on the government.
- **Import of Goods and Services:** It is the purchases of goods and services from another country.
- **Inflation:** Inflation is defined as the gradual and persistent rise in the general price level. The consumer price index (CPI) published and complied by NRB has been taken as the measurement of inflation. Symbolically, Δ InP_t= Inflation (InP_t-InP_{t-1})

3.5 Regression Equation

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

1. $Y = a_0 + a_1 X_1$
2. $Y = a_0 + a_1 X_2$
3. $Y= a_0 + a_1x$

Where,

Y = Gross Domestic Product (GDP)
X= Total Debt (TD)
X_1 = Internal Debt (ID)
X_2 = External Debt (ED)
$a_0$and a_1 are the parameters.

3.6 Test of Significance of the Parameter Estimates

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

3.6.1 t-test

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

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

Where,

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

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

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

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

3.6.2 F-test

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

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

Where, R^2 = Coefficient of determination
K = Number of explanatory variables
N = Number of observations in the sample

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

If $F_{cal} < F_{tab}$. We accept null hypothesis.
If $F_{cal} > F_{tab.}$ We reject null hypothesis.

CHAPTER 4
DATA PRESENTATIONANDANALYSIS

4.1 Introduction

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

The phenomenon of public debt was originated in Great Britain in 17th century where city merchants provided grants and loans to the government. It is interrelated with the basic government fiscal flows of taxation and expenditure. When the volume of government expenditure exceeds that of the government revenue, the deficit budget arises. Thus a deficit budget provides the fundamental precondition for debt creation. Such created debt needs interest payment to maintain the debt and refinancing operations of the debt.

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

Nepal was a debt free country until 1951 A.D. With the enforcement of Public Debt Act 1960, domestic public in the forms of Treasury Bills, Development Bonds, and National Saving Certificates were issued in 1962, 1963/64 and 1984 respectively. These bonds and bills are of regular nature. Some of them are issued as deficit –financing instruments while others are issued with a view to deepen the money mark. Besides, there are many other bonds such as: Special Bonds, Land Compensation Bonds (1964), Forest Compensation Bonds (1965), Interest Prize Bonds (1991) and other various special bonds.

In Nepal, first experience of foreign aid was that of the US government in 23 January, 1951 with an agreement of 'fur-point-program'. In the first five year plan (1956/57-1960/61) of Nepal, the development expenditure was fulfilled by foreign grants. But from second three year plan (1962/63-1964/65), Nepal started to obtain the external debt form 1963/64 and internal debt from FY 1964. For the first time FY 1963/64, the government flatted securities for mobilizing internal saving to finance the country's economic development programs. The amount of external borrowing of Nepal has continued increase every year. The main sources of external borrowing of Nepal are bilateral sources i.e. developed countries, mainly America, Japan, Norway, China, India and others and Multilateral sources like IMF, WB, and ADB.(Sharma; 1998)

There are mainly three reasons for raising the government borrowing.

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

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

Deficit = Expenditure – (Revenue + Foreign Grant)

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

4.2 The Budgetary Operations of the Government of Nepal

In every country, the financial operations start with the expenditure and revenue of that government. The total expenditure is the total budget of the country for that year, which government have to spend in that fiscal year to meet the regular and capital necessary of that government.

The government meets the budget/ expenditure of that fiscal year by various resources like revenue, foreign grants, loans (foreign and domestic loan) and foreign assistance. The main sources of the budget are revenue and foreign grants. If government couldn't meet the budget for that year by revenue and foreign grants, than it will take the loans (foreign and domestic) to fulfill the fiscal deficit of the budget. Again if government can't meet the budget, it will take the foreign assistance (foreign assistance may be on loan which country should repay and it may be financial which don't repay). After this all process the government able to meet the budget for that fiscal year. In the table, it shows the three deficit situation which will fulfill by the foreign grants, loans (foreign and domestic) and foreign assistance.

Revenue Deficit

Revenue deficit is that situation where expenditure is greater than the revenue of that fiscal year.

Where,
Revenue Deficit (b-a) = Expenditure-Revenue

Fiscal deficit (a + c - b)

Fiscal deficit is the situation when revenue and foreign grants can't meet the total expenditure/ budget of that fiscal year.

Where,
Fiscal deficit (a + c - b) = total expenditure-revenue-foreign grants

Change in Balance (-) surplus

It is the situation of deficit while loans (foreign and domestic) also can't meet the fiscal deficit for that fiscal year.

Where,
Change in Balance = fiscal deficit + foreign assistance

Resource gap is the gap between total expenditure and total revenue of the government. Nepal is experiencing a serious and growing resource gap because the annual growth rate of total expenditure and that of its revenue are not increasing in the same pace. In Nepalese economy, resource gap has been a common phenomenon since the start of the systematic budgetary system. Every individual as well as government needs fund to maintain their daily expenditure but importance of fund is much more essential for government due to the concept of national development. To finance for the development works government must be collect funds through the taxation and other sources of revenue. However government revenue is inadequate to meet the expenditure because of limited sources of revenue generation. To collect needy funds government must be increased in the tax rate and fees, which is unjustifiable for the point of view of social welfare. On the other side the tax and custom administration is not fair, transparent and agile to somewhat extent so that government cannot collect the revenue as it predicts. That is why the annual growth rate of total expenditure and the collected revenue are not increasing in the same pace. Thus, revenue expenditure gap is growing in every fiscal year. The extent of financial resource gap is shown in Table 4.1.

Table 4.1
Different Scenario of Resource Gap (2000/01 to 2015/16)

(Rs. in million)

Fiscal Year	Revenue (a)	Expenditure (b)	Revenue deficit (b-a)	Foreign Grants (c)	Fiscal Deficit (a+c-b)	Sources of Deficit Financing		Change in Balance (-) surplus	Foreign Assistance
						Foreign Loan	Domestic Loan		
2000/01	48893.6	79835.1	30941.5	6753.4	24188.0	12044.0	7000.0	5144.0	18797.5
2001/02	50445.5	80072.2	29626.7	6686.1	22940.6	7698.7	8000.0	7241.9	14384.8
2002/03	56229.8	84006.1	27776.3	11339.1	16437.2	4546.4	8880.0	3010.7	15885.6
2003/04	62331.0	89442.6	27111.6	11283.4	15828.2	7629.0	5607.8	2591.4	18912.4
2004/05	70122.7	102560.5	32437.8	14391.2	18046.6	9266.1	8938.1	-157.6	23657.3
2005/06	72282.1	110889.2	38607.1	13827.5	24779.6	8214.3	11834.2	4731.1	22041.8
2006/07	87712.1	133604.6	45892.5	15800.8	30091.7	10053.5	17892.3	2145.9	25854.3
2007/08	107622.5	161349.9	53727.4	20320.7	33406.7	8979.9	20496.4	3930.4	29300.6
2008/09	143474.5	219661.9	76187.4	26382.9	49804.6	9968.9	18417.1	21418.6	36351.7
2009/10	179945.8	259689.1	79743.3	38546.0	41197.3	11223.4	29914.0	59.9	49769.4
2010/11	199819.0	295363.5	95544.5	45922.2	49622.3	12075.6	42515.8	-4969.1	57997.8
2011/12	244561.1	339167.5	94606.4	40810.3	53796.1	11083.1	36418.7	6294.4	51893.4
2012/13	298697.7	358638.0	59940.3	35229.8	24710.5	11969.1	19042.9	-6301.4	47198.9
2013/14	369227.7	435052.3	65824.6	42205.8	23618.8	17998.8	19982.9	-14362.9	60204.6
2014/15	413929.8	531340.0	117410.2	38174.3	79235.8	25531.3	42367.6	1137.0	63705.6
2015/16R	469425.5	701171.7	231746.2	67079.7	164666.5	58611.5	88000.0	18055.0	125691.1
AAGR	**15.5**	**15.0**	**17.3**	**18.2**	**24.5**	**16.6**	**25.2**		

Note: R = Revised Estimates
Source: A Handbook of Government Finance Statistics, Nepal Rastra Bank, Volume V, March 2017, Table no. 1

In the above Table 4.1 second column and third column shows the trends in revenue and expenditure in Nepal. The fourth column shows the revenue expenditure gap in which we can see the increasing tendency mainly because of increasing volume of total expenditure than revenue. The amount of total expenditure was Rs. 79835.1 million in FY 2000/01 has gone up to Rs. 701171.7 million in 2015/16; whereas total revenue has increased from 48893.6 million in FY 2000/01 to Rs. 469425.5 in FY 2015/16. This shows the public expenditure has dominated to government revenue. Thus, the revenue-expenditure gap is Rs. 30941.5 million in FY 2000/01. The expenditure gap is continuously increasing each fiscal year. In FY 2015/16 the gap has been Rs. 231746.2 million. This indicates that the resource gap is serious problem in Nepal.

Column fifth shows the trends in foreign grants. Column six shows fiscal deficit (gap) in which we can see the increasing tendency mainly because of increasing volume of total expenditure than revenue and foreign grants. The amount of foreign grants was Rs. 6753.4 million in FY 2000/01 has gone up to Rs. 67079.7 million in 2015/16; whereas total revenue has increased from 24188.0 million in FY 2000/01 to Rs. 164666.5 in FY 2015/16. This shows the public expenditure has dominated to government revenue and foreign grants. The fiscal gap is continuously decreasing since 2000/01 to 2003/04 and increasing since 2004/05 to 2015/16.

Column seven and eight show the trends of loan which is taken from internal and external source. It tries to fulfill the fiscal deficit of that fiscal year. The amount of loans (internal loan and external loan) was Rs. 7000.0million and Rs. 12044.0 million in FY 2000/01 has gone up to Rs. 88000.0million and Rs. 58611.5 million in 2015/16 respectively. Column nine and ten show the trends of change in balance and foreign assistance of that fiscal year.

In above table 4.1, it only shows the resource gap of different fiscal year and the trends of the resource but in below table 4.2 it shows the resource with compare to the GDP of that year. The trends of revenue deficit and fiscal deficit show in table 4.2 as percentage of the GDP in below.

Table 4.2
Resource Gap as Percentage of GDP (2000/01 to 2015/16)

(Rs. in million)

Fiscal Year	GDP at Producer's price	Revenue deficit	Revenue Deficit as % of GDP	Fiscal Deficit	Fiscal Deficit as % of GDP
2000/01	441518.5	30941.5	7.0	24188	5.5
2001/02	459442.6	29626.7	6.4	22940.6	5.0
2002/03	492230.8	27776.3	5.6	16437.2	3.3
2003/04	536749.1	27111.6	5.1	15828.2	2.9
2004/05	589411.7	32437.8	5.5	18046.6	3.1
2005/06	654084.1	38607.1	5.9	24779.6	3.8
2006/07	727827	45892.5	6.3	30091.7	4.1
2007/08	815658.2	53727.4	6.6	33406.7	4.1
2008/09	988272	76187.4	7.7	49804.6	5.0
2009/10	1192774	79743.3	6.7	41197.3	3.5
2010/11	1366953	95544.5	7.0	49622.3	3.6
2011/12	1527344	94606.4	6.2	53796.1	3.5
2012/13	1695011	59940.3	3.5	24710.5	1.5
2013/14	1964540	65824.6	3.4	23618.8	1.2
2014/15	2120470	117410.2	5.5	79235.8	3.7
2015/16R	2248691	231746.2	10.3	164666.5	7.3
AAGR			**6.2**		**3.8**

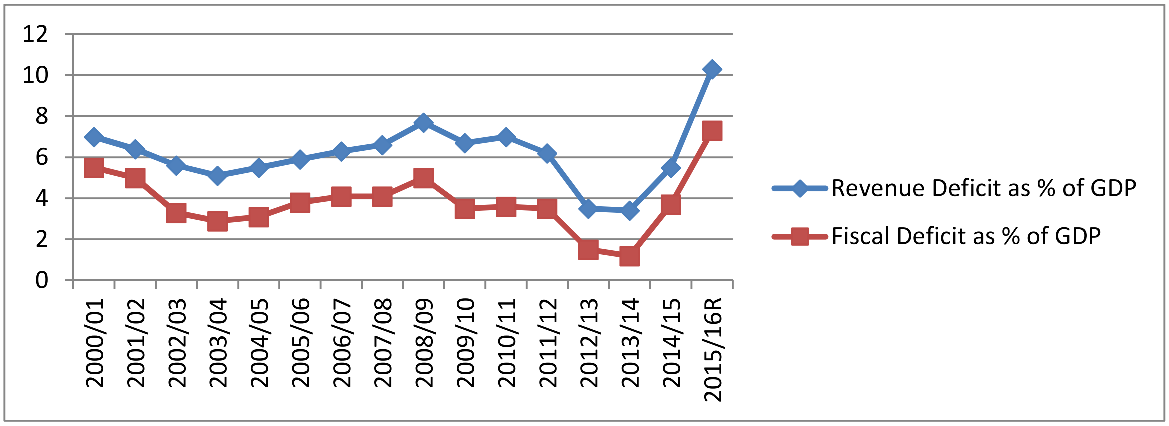
Note: R = Revised Estimates

Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 26

Table 4.2 reveals the revenue deficit as percent of GDP and fiscal deficit as percent of GDP. To analyze the revenue deficit as percent of GDP is more important as the GDP is the main indicator of the performance of the economy, which includes different components of the economy, and shows their performance. In this context, revenue deficit as percent of GDP has increased from 7.0 percent in 2000/01 to 10.3 percent in 2015/16, and average annual growth rate is 6.2 percent.

The fiscal deficit as percent of GDP also increased from 5.5 percent in 2000/01 to 7.3 percent in 2015/16. The trend of revenue deficit as percent of GDP and fiscal deficit as percent of GDP is shown in the graph below.

Figure 4.1
Revenue Deficit and Fiscal Deficit as a Percentage of GDP (2000/01-2015-16)



Source: Self Compiled from Table Number 4.2

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

4.3 Trend and Growth Rate of Public Debt in Nepal

Public debt has been the main source for financing fiscal deficit in Nepal. Although for financing the fiscal deficit both internal and external sources of borrowing have been used in any under developed economy. The total public debt has been increasing rapidly since the restoration of multiparty system in Nepal for meeting the requirement of fiscal deficit.

Table 4.3
Internal and External Debt as percentage of Fiscal Deficit

(Rs. in million)

Fiscal Year	Fiscal Deficit (I)	Total Debt	Total Debt as % of fiscal Deficit	Internal Debt (II)	II as % of Total Debt	External Debt (III)	III as % of Total Debt	Loan as a % of fiscal deficit	
								Internal Loan	External Loan
2000/01	24188	19044	78.7	7000.0	36.8	12044.0		28.9	49.8
2001/02	22940.6	15698.7	68.4	8000.0	51.0	7698.7	49.0	34.9	33.6
2002/03	16437.2	13426.4	81.4	8880.0	66.1	4546.4	66.9	54.0	27.7
2003/04	15828.2	13236.8	83.6	5607.8	42.4	7629.0	57.6	35.4	48.2
2004/05	18046.6	18204.2	100.9	8938.1	49.1	9266.1	50.9	49.5	51.3
2005/06	24779.6	20048.5	80.9	11834.2	59.0	8214.3	41.0	47.8	33.1
2006/07	30091.7	27945.8	92.9	17892.3	64.0	10053.5	36.0	59.5	33.4
2007/08	33406.7	29476.3	88.2	20496.4	69.5	8979.9	30.5	61.4	26.9
2008/09	49804.6	28386	57.0	18417.1	64.9	9968.9	35.1	37.0	20.0
2009/10	41197.3	41137.4	99.9	29914.0	72.7	11223.4	27.3	72.6	27.2
2010/11	49622.3	54591.4	110.0	42515.8	77.9	12075.6	22.1	85.7	24.3
2011/12	53796.1	47501.8	88.3	36418.7	76.7	11083.1	23.3	67.7	20.6
2012/13	24710.5	31012	125.5	19042.9	61.4	11969.1	38.6	77.1	48.4
2013/14	23618.8	37981.7	160.8	19982.9	52.6	17998.8	47.4	84.6	76.2
2014/15	79235.8	67898.9	85.7	42367.6	62.4	25531.3	37.6	53.5	32.2
2015/16R	164666.5	146612	89.0	88000.0	60.0	58611.5	40.0	53.4	35.6
AAGR	**24.5**	**18.9**		**25.19**		**16.58**		**56.4**	**36.8**

Note: R = Revised Estimates

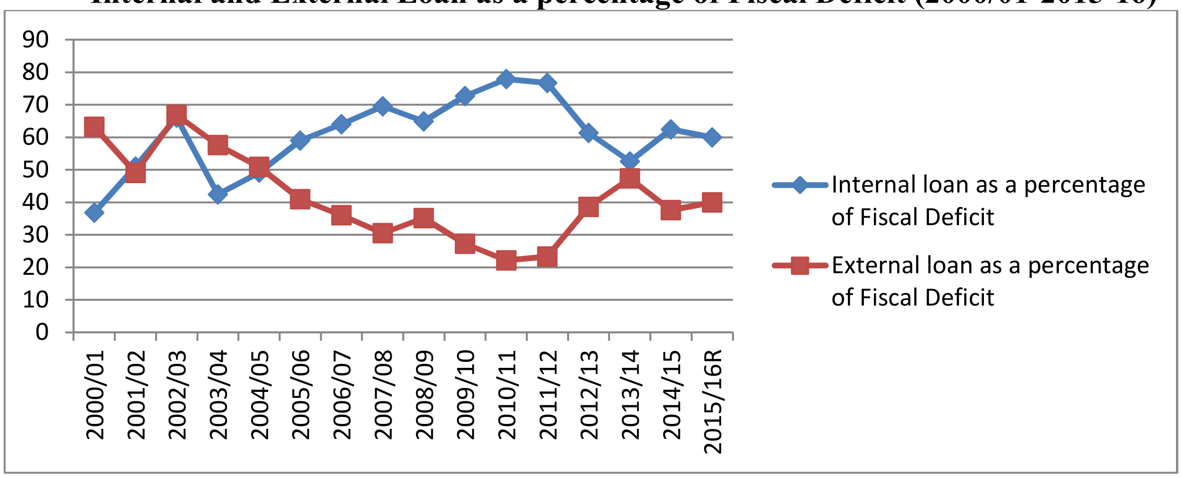
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1

The Table 4.3 indicates the increasing trend of public debt from both internal and external sources. The total debt was Rs. 19044 million in FY 2000/01 and has increased to Rs. 146612million in the FY 2015/16. Its average annual rate of growth over the review period is 18.9 percent. The table shows the increasing trend of public debt in which the increasing trend of external debt is so rapidly then internal debt. Internal debt was only Rs. 7000 million in the FY 2000/01 and has gone up to Rs. 88000 in 2015/16. Whereas external debt was Rs. 12044 million and increased tremendously up to Rs. 58611.5 million in 2015/16.

Table 4.3 shows the percentage share of internal and external debt to fiscal deficit, in which the contribution of both internal and external debt to their fiscal deficit has been fluctuating. The contribution of internal debt to fiscal deficit was 28.9 percent in the FY 2000/01 whereas external debt was 49.8 percent. But the share of internal debt is 53.4 percent in the FY 2015/16 which shows the increasing contribution and external is 35.6 percent in the same fiscal year, which shows the decreasing contribution to the fiscal deficit.

The absolute terms of the above table show our growing reliance on external loan for meeting the ever-increasing fiscal deficit. This absolute term also shows that (during the last 16 years) our economic performance has not been conducive enough to reduce growing reliance on external loan. This situation has led us to think seriously about the alarming situation. The trend of internal loan as percent of fiscal deficit and external loan as percent of fiscal deficit is shown in the graph.

Figure 4.2
Internal and External Loan as a percentage of Fiscal Deficit (2000/01-2015-16)



Source: Self Compiled from Table Number 4.3

4.4 Growth Trend of Public Debt in Nepal

After the restoration of multiparty system, the scope of government has been increasing and investing more, so the government expenditure is increasing. The reliance on taxation is not possible in view of the large amount of financial resources required for government expenditure due to the administration is not fair, and transparent. So, Nepal is facing large and growing financial resource gap in the government budgetary. In this context, the government borrowing both external and internal needs for supplements this resource gap. The government has to borrow large amount of loans to meet the fiscal deficit, which is shown on Table 4.4

Table 4.4
Internal and External Debt compare with its Annual Growth Rate
(Rs. in million)

Fiscal year	Total Debt (a)	Internal Debt (b)	External Debt (c)	Annual Growth Rate of (a) %	Annual Growth Rate of (b) %	Annual Growth Rate of (c) %	% Share of (b) in 'a'	% Share of (c) in 'a'
2000/01	19044	7000.0	12044.0	0	0	0	36.8	63.2
2001/02	15698.7	8000.0	7698.7	-17.6	14.3	-36.1	51.0	49.0
2002/03	13426.4	8880.0	4546.4	-14.5	11.0	-40.9	66.1	33.9
2003/04	13236.8	5607.8	7629.0	-1.4	-36.8	67.8	42.4	57.6
2004/05	18204.2	8938.1	9266.1	37.5	59.4	21.5	49.1	50.9
2005/06	20048.5	11834.2	8214.3	10.1	32.4	-11.4	59.0	41.0
2006/07	27945.8	17892.3	10053.5	39.4	51.2	22.4	64.0	36.0
2007/08	29476.3	20496.4	8979.9	5.5	14.6	-10.7	69.5	30.5
2008/09	28386	18417.1	9968.9	-3.7	-10.1	11.0	64.9	35.1
2009/10	41137.4	29914.0	11223.4	44.9	62.4	12.6	72.7	27.3
2010/11	54591.4	42515.8	12075.6	32.7	42.1	7.6	77.9	22.1
2011/12	47501.8	36418.7	11083.1	-13.0	-14.3	-8.2	76.7	23.3
2012/13	31012	19042.9	11969.1	-34.7	-47.7	8.0	61.4	38.6
2013/14	37981.7	19982.9	17998.8	22.5	4.9	50.4	52.6	47.4
2014/15	67898.9	42367.6	25531.3	78.8	112.0	41.9	62.4	37.6
2015/16R	146612	88000.0	58611.5	115.9	107.7	129.6	60.0	40.0
AAGR	**18.9**	**25.2**	**16.6**	**20.2**	**26.9**	**17.7**		

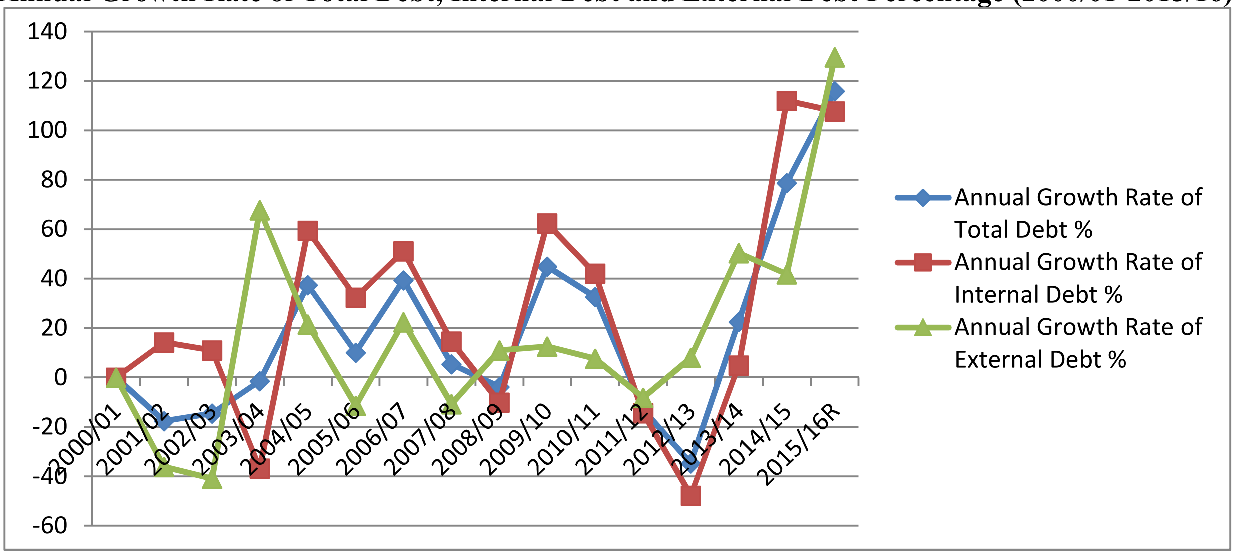
Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1

Table 4.4 shows the government borrowing (internal and external) and their annual growth rate between the period 2000/01 and 2015/16. The table shows, that over the review period total government borrowing has increased with an average annual growth rate of 20.2 percent from Rs. 19044 million to Rs. 146612million. Similarly external borrowing also increases with an average annual growth rate of 17.7 percent from Rs.12044 million to Rs. 58611.5 million during the period of study. The average annual growth rate of internal debt is 26.9 percent and increasing in trend from Rs. 7000.0 million to Rs. 88000.0 million.

Table 4.4 also indicates that the external debt increased more than the internal debt in absolute term during the period of review. Although the trend clearly shows that the government borrowing is increasing in both absolute and relative terms. The percentage share of external and internal debt in total debt is 40.0 and 60.0 percent respectively in 2015/16. It indicates that external loan is in decreasing rate and internal loan is in increasing rate. It might be due to the political instability and ineffective use of loans to achieve the goals which enforced to think over the faith of government of Nepal by the internal as well as external donors. The annual growth rate of total debt, external debt and internal debt is shown in the graph.

Figure 4.3

Annual Growth Rate of Total Debt, Internal Debt and External Debt Percentage (2000/01-2015/16)



Source: Self Compiled from Table Number 4.4

4.5 Contribution of Debt in the GDP

Debt is use to fulfill the deficit financing of the government budgetary program of that year. Government takes debt internal and external too. The use of that debt in various sector directly or indirectly affect in the GDP of that country for that same year. In below table show the debt affect in GDP.

Table 4.5
Contribution of Debt in the GDP

(Rs. in million)

Fiscal Year	Total Debt	Internal Debt	External Debt	GDP	Total Debt as % of GDP	Internal Debt as % of GDP	External Debt as % of GDP
2000/01	19044	7000.0	12044.0	441518.5	4.3	1.6	2.7
2001/02	15698.7	8000.0	7698.7	459442.6	3.4	1.7	1.7
2002/03	13426.4	8880.0	4546.4	492230.8	2.7	1.8	0.9
2003/04	13236.8	5607.8	7629.0	536749.1	2.5	1.0	1.4
2004/05	18204.2	8938.1	9266.1	589411.7	3.1	1.5	1.6
2005/06	20048.5	11834.2	8214.3	654084.1	3.1	1.8	1.3
2006/07	27945.8	17892.3	10053.5	727827	3.8	2.5	1.4
2007/08	29476.3	20496.4	8979.9	815658.2	3.6	2.5	1.1
2008/09	28386	18417.1	9968.9	988272	2.9	1.9	1.0
2009/10	41137.4	29914.0	11223.4	1192774	3.4	2.5	0.9
2010/11	54591.4	42515.8	12075.6	1366953	4.0	3.1	0.9
2011/12	47501.8	36418.7	11083.1	1527344	3.1	2.4	0.7
2012/13	31012	19042.9	11969.1	1695011	1.8	1.1	0.7
2013/14	37981.7	19982.9	17998.8	1964540	1.9	1.0	0.9
2014/15	67898.9	42367.6	25531.3	2120470	3.2	2.0	1.2
2015/16R	146612	88000.0	58611.5	2248691	6.5	3.9	2.6

Note: R = Revised Estimates
Source: Adopted and computed from NRB,A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1 and 26

In year 2000/01, total debt as the percentage of GDP is 4.3 and it decreased up to year 2003/04 is 2.5 and gone up to 3.6 in year 2007/08. In year 2008/09 the percentage is decreased to 2.9 and again gone up to 4.0 in 2010/11. It decreased up to 1.8 in 2012/13 and gone up to 6.5 in 2015/16. It shown that debt is totally utilized in 2015/16 is 6.5 than other year.

4.6 Outstanding Public Debt in Nepal

The government of Nepal has to borrow large amount of public debt to meet ever increasing financial resource gap. Usually public debt is used as a means of meeting government budgetary deficit, but in case of Nepal, it has become main and reliable source of meeting the government's budget deficit over the last years. So the volume of outstanding public debt is continuously increasing.

In Nepal, Public debt is used as a means of financing the government expenditure. There was a target of 20.79 percent of total expenditure to be financed through public debt in 2004/05 but about 24 percent of total expenditure was financed by public debt in FY 2000/01. And about 15 percent of total expenditure was fulfilled by public debt in 2003/04. It shows that slightly decreasing direction but increasing trend in practice (Gorkhapatra, July 17, 2005).

Table 4.5 shows that the net outstanding debt in Nepal, over the review period. The table shows that total outstanding public debt of the government of Nepal has increased from Rs. 261594.4 million in 2000/01 to Rs. 616685.5 in 2015/16 with the average annual growth rate of 5.7 percent. The table also shows that the outstanding external debt and outstanding internal debt. The outstanding external debt has increased from Rs. 201150.6 million in 2000/01 to Rs. 382527.8 million in 2015/16. Its share in total outstanding debt was 77.0 percent in 2000/01 that has decreased up to 68.6 percent in 2006/07 and 62.0 percent in 2015/16. On the other hand internal outstanding debt has increased from Rs. 60043.8 million in 2000/01 to Rs. 234158.0 million in 2015/16, where its percentage share in total outstanding debt was 23.0 in 2000/01 and 38.0 in 2015/16. The average annual growth rate of external outstanding debt is 4.4percent and the average annual growth rate of internal outstanding debt is 9.2percent. Table 4.5 shows that during the review period the percentage share of external debt to the total outstanding debt was above 65percent and that of the internal debt was below 35percent in each year. One of the factors responsible for rapid increase in the external debt is depreciation of Nepalese currency. Some other attributing factors are growing needs of foreign currencies, to bridge the current account deficits and capital deficiency in the economy. The average annual share of internal outstanding debt and external to total outstanding debt is 32.3 and 67.7percent respectively over the period of study. This table also indicates that the share of external debt to total outstanding public debt is higher than that of internal. So, in reality we have been indebted to external debt to a considerable extent. The government of Nepal should, therefore make a rigorous attempt to reduce the increasing debt burden.

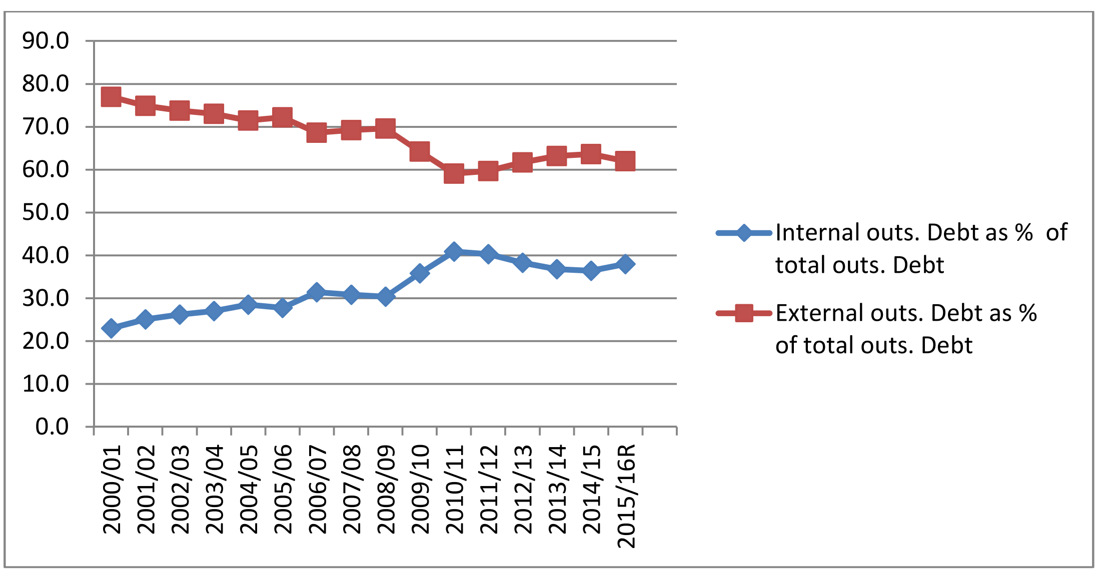
Table 4.6
Outstanding Public Debt

(Rs. in million)

Fiscal Year	Total Outs. Debt(1)	Internal Outs. Debt(2)	External Outs. Debt(3)	(2) as a Percentage of (1)(4)	(3) as a Percentage of (1)(5)
2000/01	261594.4	60043.8	201550.6	23.0	77.0
2001/02	293746.5	73620.9	220125.6	25.1	74.9
2002/03	302951.4	79518.2	223433.2	26.2	73.8
2003/04	318913.0	86133.7	232779.3	27.0	73.0
2004/05	307206.2	87564.3	219641.9	28.5	71.5
2005/06	323923.5	89954.9	233968.9	27.8	72.2
2006/07	315932.7	99303.8	216628.9	31.4	68.6
2007/08	361204.5	111239.1	249965.4	30.8	69.2
2008/09	397914.1	120873.7	277040.4	30.4	69.6
2009/10	399103.0	142859.7	256243.3	35.8	64.2
2010/11	438880.2	179328.4	259551.8	40.9	59.1
2011/12	518407.3	209120.2	309287.1	40.3	59.7
2012/13	540443.2	207001.7	333441.5	38.3	61.7
2013/14	548636.6	201817.5	346819.1	36.8	63.2
2014/15	540047.6	196785.8	343261.8	36.4	63.6
2015/16R	616685.8	234158.0	382527.8	38.0	62.0
AAGR	**5.7**	**9.2**	**4.4**	**32.3**	**67.7**

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 21

Figure 4.4
Internal and External Outstanding Debt as a Percentage of Total Outstanding Debt (2000/01-2015/16)



Source: Self Compiled from Table Number 4.6

4.7 Pattern of Internal Net Outstanding Debt

Internal borrowing program carried since 1961 in Nepal. Nepal has been borrowing internally under the different plans to bridge the resource gap on the budgetary system and mobilizing financial resource for development.

Now the government receives the internal borrowing by issuing mainly treasury bills, development bonds, National Saving Certificate, Public Saving Card and special bonds, where public saving card is new concept and has issued since 2001/02. The pattern of internal debt is shown in table 4.7

Table 4.7
Structure of Internal Net Outstanding Debt

(Rs. in million)

Fiscal Year	Treasury Bills	Development Bonds	National Savings Bonds	Citizen Savings Bonds	Special Bonds	Total Internal Outs. Debt
2000/01	27610.8	5962.3	12476.4	0	13994.3	60043.8
2001/02	41106.5	11090.7	11536.3	628.1	9259.3	73620.9
2002/03	46844.9	13090.7	9029.8	931.1	9621.7	79518.2
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	87564.3
2005/06	62970.3	17959.2	3876.8	1678.9	3469.8	89954.9
2006/07	74445.3	19177.1	1516.9	1391.0	2773.5	99303.8
2007/08	85033.0	21735.4	1116.9	3014.4	339.4	111239.1
2008/09	86515.1	29478.5	216.9	4433.6	229.6	120873.7
2009/10	102043.7	35519.4	0	5126.9	169.7	142859.7
2010/11	120340.7	43519.4	10680.0	4630.3	158.0	179328.4
2011/12	131624.1	57519.4	15680.0	4139.1	157.6	209120.2
2012/13	136468.1	51610.9	15680.0	3242.7	0	207001.7
2013/14	136468.1	47110.9	16586.5	1652.0	0	201817.5
2014/15	119858.1	57070.0	16586.5	3271.2	0	196785.8
2015/16R	116059.1	108900.0	906.5	8292.4	0	234158.0

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 20

Internal Outstanding = TB + DB + NSC + CSB + SB

Table 4.8
Structure of Internal Net Outstanding Debt in Percentage

(Rs. in million)

Fiscal Year	Total Internal Outs. Debt(1)	% share of Treasury Bills to (1)	% share of Development Bonds to (1)	% share of National Savings Bonds to (1)	% share of Citizen Savings Bonds to (1)	% share of Special Bonds to (1)
2000/01	60043.8	46.0	9.9	20.8	0.0	23.3
2001/02	73620.9	55.8	15.1	15.7	0.9	12.6
2002/03	79518.2	58.9	16.5	11.4	1.2	12.1
2003/04	86133.7	57.4	20.4	10.5	1.4	10.4
2004/05	87564.3	58.7	22.8	7.5	1.6	9.3
2005/06	89954.9	70.0	20.0	4.3	1.9	3.9
2006/07	99303.8	75.0	19.3	1.5	1.4	2.8
2007/08	111239.1	76.4	19.5	1.0	2.7	0.3
2008/09	120873.7	71.6	24.4	0.2	3.7	0.2
2009/10	142859.7	71.4	24.9	0.0	3.6	0.1
2010/11	179328.4	67.1	24.3	6.0	2.6	0.1
2011/12	209120.2	62.9	27.5	7.5	2.0	0.1
2012/13	207001.7	65.9	24.9	7.6	1.6	0.0
2013/14	201817.5	67.6	23.3	8.2	0.8	0.0
2014/15	196785.8	60.9	29.0	8.4	1.7	0.0
2015/16R	234158.0	49.6	46.5	0.4	3.5	0.0

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 20

Table 4.8 shows the structure of internal net outstanding debt in which the government mainly receives the internal resources by five sources. Among them Citizen Saving Bond was started from 2001/02. Before this, there were only four sources, which contributed much more in the field of internal net outstanding debt where the contribution of Treasury Bills is larger.

The share of Treasury Bills, Development Bonds, National saving Certificate, Public Saving Card and Special Bonds to total net internal outstanding debt which are 46percent, 9.9percent, 20.8percent, 0percent and 23.3 percent respectively in 2000/01. Which has increased over the review period in case of treasury bills and there is fluctuating trend in case of Saving Certificate, Public Saving Card and Special Bonds over the review period.

The percentage share of Treasury Bills is 49.6 and of Development Bonds, National Saving Certificate, Citizen Saving Bond and special bonds are 46.5 percent, 0.4 percent, 3.5 percent and 0 percent respectively in FY 2004/05. The above table shows that the volume of internal borrowing is increasing without increasing in tax revenue collection in proportion to the growth in the government expenditure. This action also will create the inflationary situation, which may leads us into debt crisis in future.

4.8 Pattern of External Net Outstanding Debt

The foreign assistance in terms of grants and loans are the major sources of external financing in Nepal. Needs of external borrowing is growing due to the revenue deficit. Internal debt is not sufficient to government for development activities. So, external debt is the most essential source of revenue to the government. Nepal has borrowed the external loan through bilateral and multilateral sources. Bilateral loans are loans from government and their agencies, loans from autonomous bodies and direct loans from official export credit agencies. Multilateral loans are loans and credits from multilateral agencies such as WB, IMF, ADB and multilateral and intergovernmental agencies. The pattern of bilateral and multilateral debt is shown in the following table.

Table 4.9
Structure of External Net Outstanding Debt

(Rs. in million)

Fiscal Year	Total External Debt(1)	Bilateral Debt(2)	Multilateral Debt(3)	2 as a % of 1	3 as a % of 1
2000/01	12044.0	587.00	11457.00	4.9	95.1
2001/02	7698.7	87.00	7611.70	1.1	98.9
2002/03	4546.4	657.41	3888.99	14.5	85.5
2003/04	7629.0	66.37	7562.63	0.9	99.1
2004/05	9266.1	126.02	9140.08	1.4	98.6
2005/06	8214.3	40.25	8174.05	0.5	99.5
2006/07	10053.5	1048.58	9004.92	10.4	89.6
2007/08	8979.9	632.18	8347.72	7.0	93.0
2008/09	9968.9	613.09	9355.81	6.2	93.9
2009/10	11223.4	4551.09	6672.31	40.6	59.5
2010/11	12075.6	4112.95	7962.65	34.1	65.9
2011/12	11083.1	2881.61	8201.49	26.0	74.0
2012/13	11969.1	2083.82	9885.28	17.4	82.6
2013/14	17998.8	2887.01	15111.79	16.0	84.0
2014/15	25531.3	4258.62	21272.68	16.7	83.3
2015/16R	58611.5	5644.29	52967.21	9.6	90.4
AAGR	**16.58**	**228.66**	**18.38**	**12.9**	**87.1**

Note: R = Revised Estimates

Source: Adopted and computed from GoN, FGCO, Consolidated Financial Statement, FY 2005/06, Table no. V, FY 2010/11, Table no. 5, FY 2015/16, Table no. 25, NRB,A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1

Table 4.9 shows that the pattern of external debt in terms of disbursement by major sources. The table observed that bilateral loan is in decreasing trend and multilateral loan is in increasing trend and it also reflects that the total external debt has been increasing in each fiscal year.

External debt is Rs. 12044.0 million in FY 2000/01 which is increased to Rs. 58611.5million in FY 2015/16.In FY 2000/01, Rs. 587.0million from bilateral source and Rs. 11457.0million from multilateral source were collected where the share is 4.9 percent and 95.1percentrespectively. In FY 2015/16, the bilateral loan has been increasing to Rs. 5644.29 million and multilateral loan has been increasing to Rs. 52967.21million where the share is 9.6 percent and 90.4percentrespectively. The average annual growth rate as percentage share of bilateral and multilateral Sources is 12.9percent and 87.1percent respectively.

4.9 Burden of debt and situation of debt trap in Nepal

The debt burden refers to the extra tax imposed by government on the citizens to repay public debt including interest. Every government is bound to repay the public borrowing whether internally or externally with interest. This burden of public debt may be direct, indirect, monetary or real and it may tend to fall on the present or sometimes on the future generation.

The total burden of public debt can be divided into two parts: (1) burden of internal public debt, (2) burden of external public debt. The internal public debt means the total part of the debt which is held internally. Dalton (1949) takes internal public debt burden as not much significant as the payment of principle amount and its interest involves taxation. It is simply a transfer of purchasing power from one person to another. Similarly, Lerner (1955) points out that the internal debt may not have any direct monetary burden on a community as a whole, since the payment of interest and increased taxation to meet the burden of debt involved simply transfer of the purchasing power from one group of people to another. To the extent that creditors and tax payer are the same, there may not be any net burden to all the community. But to the extent of creditors and tax payers belong to different income groups, the changes in the distribution of income among different sections of the community may take place.

In case of external debt burden it is however, completely different. External debt imposes real burden on the economy because it reduces national welfare. External debt is paid not in monetary terms but in real terms, in terms of goods and services which are exported to the creditor country for the settlement of debt. The process will have to continue during the whole period of loan because the borrower country has to pay interest charges, but if external loans are used for increasing the productive capacity of the economy, the debt repayment may not be a serious burden. The debtor country may pay off the debt and interest without any difficulty because of increased capacity of export oriented industries. If debtor country does not sufficiently increase the production and export, it will have to face the balance of payment problem.

Therefore, any borrower country has to spend the borrowed fund on creation of new productive capacity, which further generates income and increases the rate of capital formation then it is quite possible that the debt would not be burden to the society. If the borrowed fund is spent otherwise and the government would have to borrow again to meet the requirements of development funds and for meeting the charge of debt servicing, it is quite possible that this process leads to bankruptcy of the government or debt crisis in the future. This situation leads towards the failure state.

Regarding the shift of the debt burden to the future generation, there is debate among the economists. A group of economists argues that if the present generation reduces current saving in order to repay the debt and leaves a smaller amount of capital resources for future, it will not create sufficient capacity for the coming generation. In this way, burden of public debt may pass on to the future generation. But on the other hand, another group of economists has challenged the above version and expressed opposite opinion on the subject of burden of public debt. They argue that here is no shift of the basic burden to the future generation because the state posterity, which pays the additional taxes, will be benefited from the repayment of the debt with interest.

Now a day's foreign assistance is seen so essential that each sector of the economy is wholly dependent on it in Nepal. The trend of average annual growth rate of internal debt is 3.9 percent of total debt, but external debt is 2.6 percent of Total Debt. It has the great place as a source of financing trade deficit, fiscal deficit as development expenditure is increasing day by day.

The average annual growth rate of total outstanding public debt is nearly 5.7 percent of GDP in the one hand, and the average annual growth rate of total debt servicing to GDP ratio is nearly 14 percent. This shows that debt is not mounted in very high amount in each year. The average annual growth rate of debt servicing to regular expenditure is remained at 15.7 percent and only external debt servicing is 11.6 percent.

The main reasons behind this situation are as follows:

- When borrowed money is used for repayment for principal and payment of interest.
- When large amount of loan is allocated for regular expenditure than development expenditure.
- When the borrowed amount exceeds the debt bearing capacity of the country.
- When high portion of loan is set-aside for meeting current general expenditure.

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

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

4.10 Net Outstanding Public Debt in Nepal

The ratio of public debt to GDP is an important indicator of the manageability of public debt in an economy. The relative shares of the public debt in the GDP should be taken into consideration for assessing the burden of growing public indebtedness. Nepal has to borrow huge amount of external as well as internal loans for meeting the budget deficit. And on the other hand, the tax revenue and non-tax revenue are not increasing as it is predicted and improper utilization of public debt and corruption, debt servicing capacity is not increasing as a result burden of outstanding debt is increasing. Table 4.10 shows the burden of debt through the method of measure of burden of debt as the ratio of public debt to GDP.

Table 4.10
Outstanding Debts and Its Share in GDP

(Rs. in million)

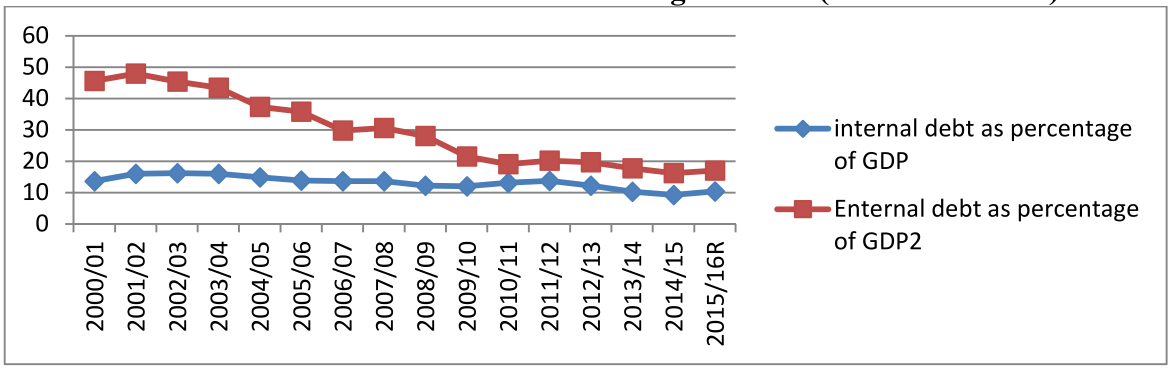
Fiscal Year	Outstanding Internal Debt	Outstanding External Debt	Total Outstanding Debt	GDP	Internal Debt as % of GDP	External Debt as % of GDP	Total Outs. Public Debt as % of GDP
2000/01	60043.8	201550.6	261594.4	441518.5	13.6	45.6	59.2
2001/02	73620.9	220125.6	293746.5	459442.6	16.0	47.9	63.9
2002/03	79518.2	223433.2	302951.4	492230.8	16.2	45.4	61.5
2003/04	86133.7	232779.3	318913.0	536749.1	16.0	43.4	59.4
2004/05	87564.3	219641.9	307206.2	589411.7	14.9	37.3	52.1
2005/06	89954.9	233968.9	323923.5	654084.1	13.8	35.8	49.5
2006/07	99303.8	216628.9	315932.7	727827	13.6	29.8	43.4
2007/08	111239.1	249965.4	361204.5	815658.2	13.6	30.6	44.3
2008/09	120873.7	277040.4	397914.1	988272	12.2	28.0	40.3
2009/10	142859.7	256243.3	399103.0	1192774	12.0	21.5	33.5
2010/11	179328.4	259551.8	438880.2	1366953	13.1	19.0	32.1
2011/12	209120.2	309287.1	518407.3	1527344	13.7	20.2	33.9
2012/13	207001.7	333441.5	540443.2	1695011	12.2	19.7	31.9
2013/14	201817.5	346819.1	548636.6	1964540	10.3	17.7	27.9
2014/15	196785.8	343261.8	540047.6	2120470	9.3	16.2	25.5
2015/16R	234158.0	382527.8	616685.8	2248691	10.4	17.0	27.4
AAGR					**13.2**	**29.7**	**42.9**

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 21 and 26

Table 4.10shows the magnitude of outstanding debt, GDP and their ratio, which also assesses the burden of public debt. This Table shows the ratio of internal and external debt to GDP in the Year between 2000/01 to 2015/16. The share of external debt in GDP was 45.6 percent, which has decreased to 17.0 percent in the year 2015/16, showing gradual decrease. Similarly, this Table also shows the share of internal debt in GDP. It has also decreased from 13.6 percent in 2000/01 to 10.4 percent in 2015/16. It means burden of public debt is decreasing, where total outstanding public debt has increased from Rs. 261594.4 million in 2000/01 to Rs. 616685.8 million in 2015/16 and share of it in GDP has decreased from 59.2 percent to 27.4 percent.

The burden of external outstanding debt is greater than that of internal debt which may be a danger for future generation. This magnitude of the burden of public debt may increase to alarming situation if productive capacity is not created in the economy for increasing production. The share of external outstanding debt and internal outstanding debt in GDP is shown below:

Figure 4.5
Internal and External Debt as a Percentage of GDP (2000/01-2015/16)



Source: Self Compiled from Table Number 4.10

4.11Public Debt as Percentage of Fiscal Deficit

Debt is the main part to fulfill the gap of the source and expenditure of the government budgetary program. The gap of the government source (revenue) and expenditure is called fiscal deficit of that fiscal year.

Table 4.11
Public Debt as Percentage of Fiscal Deficit

(Rs. in million)

Fiscal Year	Internal Debt	External Debt	Total debt	Fiscal Deficit	Foreign Grants	Annual Growth rate of Fiscal Deficit	ID as % of Fiscal Deficit	ED as % of Fiscal Deficit
2000/01	7000.0	12044.0	19044	24188	6753.4	0	28.9	49.8
2001/02	8000.0	7698.7	15698.7	22940.6	6686.1	-5.16	34.9	33.6
2002/03	8880.0	4546.4	13426.4	16437.2	11339.1	-28.35	54.0	27.7
2003/04	5607.8	7629.0	13236.8	15828.2	11283.4	-3.71	35.4	48.2
2004/05	8938.1	9266.1	18204.2	18046.6	14391.2	14.02	49.5	51.3
2005/06	11834.2	8214.3	20048.5	24779.6	13827.5	37.31	47.8	33.1
2006/07	17892.3	10053.5	27945.8	30091.7	15800.8	21.44	59.5	33.4
2007/08	20496.4	8979.9	29476.3	33406.7	20320.7	11.02	61.4	26.9
2008/09	18417.1	9968.9	28386	49804.6	26382.9	49.09	37.0	20.0
2009/10	29914.0	11223.4	41137.4	41197.3	38546.0	-17.28	72.6	27.2
2010/11	42515.8	12075.6	54591.4	49622.3	45922.2	20.45	85.7	24.3
2011/12	36418.7	11083.1	47501.8	53796.1	40810.3	8.41	67.7	20.6
2012/13	19042.9	11969.1	31012	24710.5	35229.8	-54.07	77.1	48.4
2013/14	19982.9	17998.8	37981.7	23618.8	42205.8	-4.42	84.6	76.2
2014/15	42367.6	25531.3	67898.9	79235.8	38174.3	235.48	53.5	32.2
2015/16R	88000.0	58611.5	146612	164666.5	67079.7	107.82	53.4	35.6

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1

The above table 4.11 shows the percentage of that debt in the fiscal deficit in that fiscal year. It shows the decreased percentage of 49.8 in 2000/01 and 32.2 in 2015/16 of external debt in the fiscal deficit and increased percentage of 28.9 in 2000/01 and 53.5 in 2015/16 of internal debt in the fiscal deficit.

4.12 Debt Servicing Issues in Nepal

The payment of interest and principle of public debt is known as debt servicing. The share of foreign loan is in decreasing trend that ultimately beneficial to the escape from the financial and burden on future generation.

Table 4.12 shows the ratio of internal and external debt servicing to total debt servicing and their average annual growth rate and percentage share of external and internal debt servicing to total debt servicing.

Table 4.12
Share of External and Internal Debt Servicing in Total Debt Servicing

Rs. in million

Fiscal Year	Total Debt Servicing(1)	External Debt Servicing(2)	Internal Debt Servicing(3)	2 as a % of (1)	3 as a % of (1)
2000/01	10388.40	6201.40	4187.00	59.7	40.3
2001/02	12205.20	6567.00	5638.20	53.8	46.2
2002/03	16181.30	7518.00	8663.30	46.5	53.5
2003/04	17338.80	7908.00	9430.80	45.6	54.4
2004/05	19751.30	8100.00	11651.30	41.0	59.0
2005/06	20423.50	9151.00	11272.50	44.8	55.2
2006/07	22916.30	9594.51	13321.79	41.9	58.1
2007/08	22760.60	10014.71	12745.89	44.0	56.0
2008/09	26988.30	12493.99	14494.31	46.3	53.7
2009/10	28413.60	13201.08	15212.52	46.5	53.5
2010/11	29957.60	13540.03	16417.57	45.2	54.8
2011/12	35320.00	6594.24	28725.76	18.7	81.3
2012/13	48867.00	10682.33	38184.67	21.9	78.1
2013/14	53915.00	15074.63	38840.37	28.0	72.0
2014/15	73723.00	24159.03	49563.97	32.8	67.2
2015/16R	77653.00	21936.97	55716.03	28.3	71.8
AAGR	**14.0**	**11.63**	**19.22**		

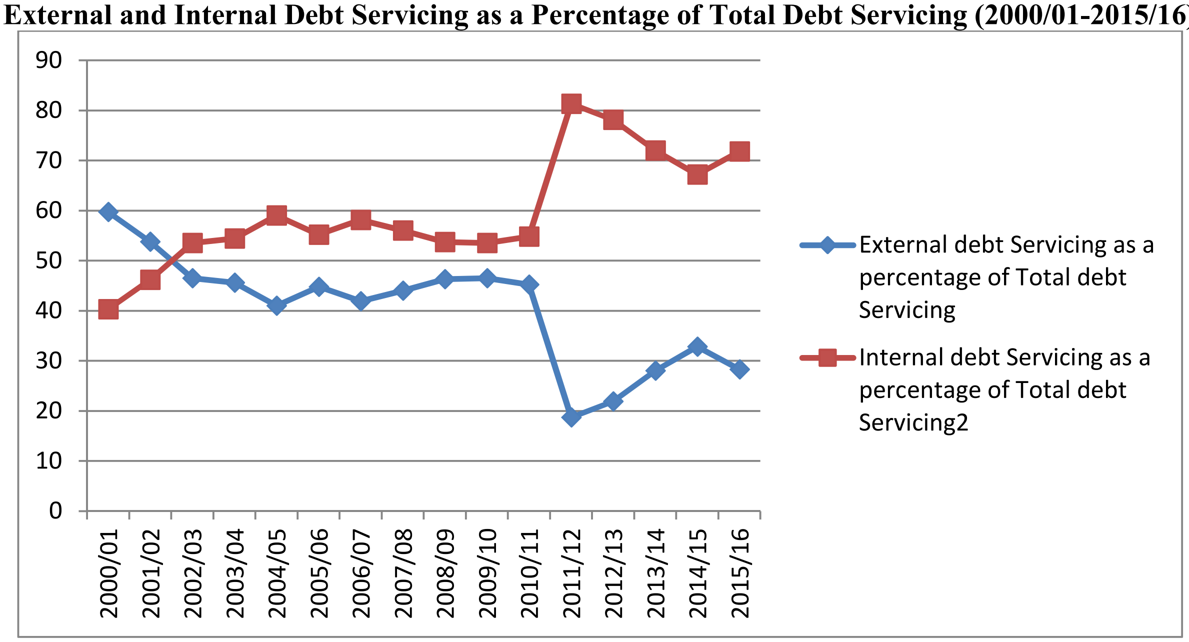
Note: R = Revised Estimates
Source: Adopted and computed from NRB,A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 3 and 4, GoN, FGCO, Consolidated Financial Statement, FY 2005/06, Table V,FY 2010/11, Performance Analysis-I, FY 2015/16, Table 32

External Debt Servicing = Repayment + Interest Payment
Internal Debt Servicing = Total Debt Servicing - External D.S.
Total Debt Servicing = Interest Payment + Principle Repayment

On observing Table 4.12, the amount of total debt servicing was Rs. 10388.40 million in 2000/01 and has increased to Rs. 77653.0 million in 2015/16 with average annual growth rate of 14.0percent. This shows as an increasing trend of total debt servicing. The volume of external debt servicing was Rs. 6201.40 million in 2000/01 and has increased to Rs. 21936.97 million in 2015/16 and the internal debt servicing was Rs. 4187.00 million in 2000/01 and has gone up to Rs. 55716.03 million in 2015/16. The average annual growth rate of total and internal debt servicing is higher than external debt servicing. The average annual growth rate of total, internal and external debt servicing are 14.0, 19.22 and 11.63percent respectively. Till FY 2001/02, the annual growth rate of external debt servicing is higher than that of internal, since then, internal debt servicing is increasing at higher rate than external debt servicing. In 2015/16 the percentage share of external and internal debt servicing to total debt servicing was 28.3 percent and 71.8 percent respectively. At the end of the year, government is doing well because it has increased its internal source to the debt servicing. It shows a happy signal of improvement in Nepal's debt servicing situation. The trend of external debt servicing and internal debt servicing as percent of total debt servicing is shown in the graph.

Figure 4.6

External and Internal Debt Servicing as a Percentage of Total Debt Servicing (2000/01-2015/16)



Source: Self Compiled from Table Number 4.12

Table 4.13

Share of Interest and Principal Payments in Total Debt Servicing

(Rs. in million)

Fiscal Year	Total Debt Servicing(1)	Principal Payments(2)	Interest Payments(3)	2 as a % of 1	3 as a % of 1
2000/01	10388.4	6201.40	4187.00	59.7	40.3
2001/02	12205.2	6434.97	5770.00	52.7	47.3
2002/03	16181.3	9559.49	662.00	59.1	4.1
2003/04	17338.8	10794.85	6544.00	62.3	37.7
2004/05	19751.3	13533.32	6218.00	68.5	31.5
2005/06	20423.5	14264.78	6159.00	69.8	30.2
2006/07	22916.3	16752.34	4108.00	73.1	17.9
2007/08	22760.6	16386.93	6374.00	72.0	28.0
2008/09	26988.3	18834.11	8154.00	69.8	30.2
2009/10	28413.6	18432.00	9981.00	64.9	35.1
2010/11	29957.6	17220.52	12737.00	57.5	42.5
2011/12	35320.00	20159.00	15161.00	57.1	42.9
2012/13	48867.00	35130.00	13737.00	71.9	28.1
2013/14	53915.00	41877.00	12038.00	77.7	22.3
2014/15	73723.00	64458.00	9265.00	87.4	12.6
2015/16R	77653.00	68980.00	8673.00	88.8	11.2
AAGR	**14.0**	**18.06**	**56.22**		

Note: R = Revised Estimates

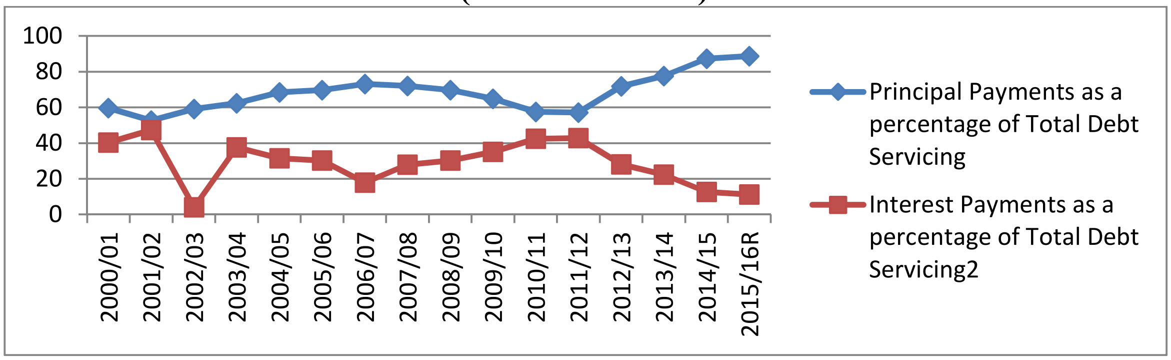
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 3 and 4, GoN, FGCO, Consolidated Financial Statement, FY 2005/06, Table V,FY 2010/11, Performance Analysis-I, FY 2015/16, Table 32

Table 4.13 shows the servicing amount of interest payments and principal payments in total debt servicing amount. Table 4.13shows the 14.0percent of average annual growth rate of total debt servicing over the study period, where share of interest amount was Rs. 4187.00 million in FY 2000/01 and has gone up to Rs. 8673.0 million in FY 2015/16. Similarly, this amount was Rs. 6201.40 million in FY 2000/01 and has gone up to Rs. 68980.00 million in FY 2015/16 over the review period. The table shows that increasing trend of principal payments is higher than interest payments. Thereafter, the share of principal amount to total debt servicing is greater than interest payments under the review period.

The servicing amount of interest and principal payments indicates that large proportion of regular expenditure has gone to creditor countries, which has hampered regular expenditure as well as development expenditure. Regular expenditure has gone to service of principle payments and interest payments indicating serious situation of debt servicing and burden of public debt of Nepal i.e. the burden of debt servicing is increasing that may adversely affect the growth process. The trend of principle payment and interest payment as percent of total debt servicing is shown:

Figure 4.7

Principal Payments and Interest Payment as a Percentage of Total Debt Servicing (2000/01- 2015/16)



Source: Self Compiled from Table Number 4.13

4.13 Ownership Pattern of Internal Debt Servicing Situation

The burden of public debt is measured by the ratio between the debt servicing and aggregate tax revenue and non-tax revenue or total revenue and the ratio between servicing cost and national income (GDP). This has been shown in Table 4.14

Table 4.14

Share of Internal Debt Servicing in Total Revenue, Regular Expenditure and GDP

(Rs. in million)

Fiscal Year	Regular Expenditure	Total Revenue	GDP	Internal Debt Servicing	D.S as % of Regular Expenditure	D.S as % of Total Revenue	D.S as % of GDP
2000/01	45837.3	48893.6	441518.5	4187.00	9.1	8.6	0.9
2001/02	48863.9	50445.5	459442.6	5638.20	11.5	11.2	1.2
2002/03	52090.5	56229.8	492230.8	8663.30	16.6	15.4	1.8
2003/04	55552.1	62331.0	536749.1	9430.80	17.0	15.1	1.8
2004/05	61686.4	70122.7	589411.7	11651.30	18.9	16.6	2.0
2005/06	67017.8	72282.1	654084.1	11272.50	16.8	15.6	1.7
2006/07	77122.4	87712.1	727827	13321.79	17.3	15.2	1.8
2007/08	91446.9	107622.5	815658.2	12745.89	13.9	11.8	1.6
2008/09	127738.9	143474.5	988272	14494.31	11.3	10.1	1.5
2009/10	186597.6	179945.8	1192774	15212.52	8.2	8.5	1.3
2010/11	210167.7	199819.0	1366953	16417.57	7.8	8.2	1.2
2011/12	243460.0	244561.1	1527344	28725.76	11.8	11.7	1.9
2012/13	247455.5	298697.7	1695011	38184.67	15.4	12.8	2.3
2013/14	303531.7	369227.7	1964540	38840.37	12.8	10.5	2.0
2014/15	339278.0	413929.8	2120470	49563.97	14.6	12.0	2.3
2015/16R	434065.9	469425.5	2248691	55716.03	12.8	11.9	2.5
AAGR	**15.7**	**15.5**	**10.8**	**19.2**	**13.5**	**12.2**	**1.7**

Note: R = Revised Estimates

Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1 and 26

The expenditure heads till FY 2002/03 were classified as regular and development. Since FY 2003/04, such expenditure has been classified as recurrent and capital. Here researcher did not submit the regular and development expenditure in FY 2003/04. So comparison is done between 2000/01 to 2002/03 in the regular and development expenditure.

Table 4.14 shows the average annual growth rate and volume of Regular Expenditure, Total Revenue, GDP and internal debt servicing. It also shows the share of Total Revenue, Regular Expenditure and GDP as percent of internal debt servicing. Over the period of the study, the magnitude of Regular Expenditure, Total Revenue, GDP and Internal debt servicing were Rs. 45837.3million, Rs. 48893.6 million, Rs. 441518.5 million and Rs. 4187.00 million in 2000/01 and has increased up to Rs. 434065.9 million, Rs. 469425.5 million, Rs. 2248691 million and 55716.03 million respectively in the FY 2015/16.

The table shows the AAGR of regular expenditure (i.e. 15.7percent), total revenue (15.5 percent), GDP (10.8 percent) and internal debt servicing was 19.2 percent. It shows that the growth rate of internal debt servicing is higher than growth rate of regular expenditure, total revenue and GDP till FY 2015/16. The trend of debt servicing is increasing and fluctuating.

Table 4.15

Outstanding Public Debt, Development Expenditure and Debt Servicing (Rs. in million)

Fiscal Year	Total Outs. Debt(1)	Development Expenditure(2)	Total Debt Servicing(3)	1 as a % of (2)	3 as a % of (2)
2000/01	261594.4	28307.2	10388.4	924.1	36.7
2001/02	293746.5	24773.4	12205.2	1185.7	49.3
2002/03	302951.4	22356.1	16181.3	1355.1	72.4
2003/04	318913.0	23095.6	17338.8	1380.8	75.1
2004/05	307206.2	27340.8	19751.3	1123.6	72.2
2005/06	323923.5	29606.6	20423.5	1094.1	69.0
2006/07	315932.7	39729.9	22916.3	795.2	57.7
2007/08	361204.5	53516.1	22760.6	674.9	42.5
2008/09	397914.1	73088.9	26988.3	544.4	36.9
2009/10	399103.0	40509.8	28413.6	985.2	70.1
2010/11	438880.2	47327.7	29957.6	927.3	63.3
2011/12	518407.3	51390.7	35320.00	1008.8	68.7
2012/13	540443.2	54598.4	48867.00	989.9	89.5
2013/14	548636.6	66694.7	53915.00	822.6	80.8
2014/15	540047.6	88754.7	73723.00	608.5	83.1
2015/16R	616685.8	159089.2	77653.00	387.6	48.8
AAGR	**5.7**	**14.7**	**14.0**		

Note: R = Revised Estimates

Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1 and 26

Observing Table 4.15, we can see the volume of outstanding debt which was Rs. 261594.4 million in 2000/01 and has increased to Rs. 616685.8 million in 2015/16 with the 5.7percent of average annual growth rate. These, show the real burden of debt of Nepal, where total outstanding public debt as percentage of development expenditure was 924.1 percent in 2000/01 and has gone up to 387.6 percent in FY 2015/16. This shows Nepal is going year by year clearing the depth of the debt burden.

Development expenditure has also gone up to Rs. 28307.2 million in FY 2000/01 and Rs. 159089.2 in FY 2015/16. Likewise, total debt servicing was Rs. 10388.4 million in 2000/01 and has gone up to Rs. 77653.00 million in 2015/16 with 14.0percent of average annual growth rate. It is greater than outstanding public debt. If the same situation continues for long run, Nepal would be free from dependency. Total debt servicing as percentage of development expenditure has increased from 36.7 to 48.8 percent during the period of study.

While discussing about the burden of internal debt, the analysis of internal debt and annual internal borrowing is an important aspect. The Table 4.16 has shown the proportional relationship between annual internal debt servicing and internal annual borrowing.

Table 4.16
Annual Internal Debt Servicing as Percentage of Annual Internal Debt
(Rs. in million)

Fiscal Year	Internal Debt	Internal Debt Servicing	IDS as % of ID
2000/01	7000.0	4187.00	59.8
2001/02	8000.0	5638.20	70.5
2002/03	8880.0	8663.30	97.6
2003/04	5607.8	9430.80	168.2
2004/05	8938.1	11651.30	130.4
2005/06	11834.2	11272.50	95.3
2006/07	17892.3	13321.79	74.5
2007/08	20496.4	12745.89	62.2
2008/09	18417.1	14494.31	78.7
2009/10	29914.0	15212.52	50.9
2010/11	42515.8	16417.57	38.6
2011/12	36418.7	28725.76	78.9
2012/13	19042.9	38184.67	200.5
2013/14	19982.9	38840.37	194.4
2014/15	42367.6	49563.97	117.0
2015/16R	88000.0	55716.03	63.3
AAGR	**25.2**	**19.2**	

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1

Observing the above table, we can find out the volume of internal debt which was Rs. 7000.00 million in 2000/01 and has gone up to Rs. 88000.00 million in 2015/16 with 25.2percent of average annual growth rate over the period of study. Likewise, internal debt servicing has also gone up from Rs. 4187.00 million to Rs. 55716.03 million with average annual growth rate of 19.2percent.

The volume of internal debt is larger than that of internal debt servicing in 2000/01 to 2015/16, but after 2005/06 the magnitude of internal debt servicing exceeds the amount of internal debt till FY 2011/12. But at the end of the study period, volume of internal debt servicing is less than the volume of internal debt. This situation indicates that the internal borrowing is being spent on debt servicing and also shows that the government's ability to borrow from internal sources is not conducive to raise enough funds for development requirement and this also shows that the increasing proportion of internal debt servicing is the manifestation of unproductive use of borrowed fund. But at the end of the study period, it became hopeful to develop capital formation by borrowing funds. Even, the proportion of internal debt servicing to the internal debt is fluctuating from the year. This indicates that the internal loan is going up.

However, this is good at the end of the year but in the past year, it was not good. Thus, the high reliance on internal borrowing for financing budgetary deficit may have the following effects.

1. Huge amount of development fund was diverted to meet debt-servicing charges, which comes under regular expenditure.
2. Borrowing from Nepal Rasta Bank in the form of overdraft will have effect on expansionary money supply and that may create inflationary pressure.
3. Likewise borrowing from commercial Banks may crowd out the private investment.
4. Crisis of fund to invest in genuine/basic development work.
5. Failure to address disaster and sudden crisis.

4.14 Issues of Foreign Loans

Underdeveloped countries like Nepal are facing a serious problem of scarcity of domestic capital formation, which is more essential for development process. And these countries are also facing the shortage of foreign exchanges. So, these countries have to borrow public debt from within the country as well as from the external sources like foreign countries and foreign agencies to breakout the vicious circle of insufficient capital formation and development bottlenecks. The scope of domestic borrowing in these countries is very limited, because internal resources are scarce. So, only external borrowing remains the alternative to be undertaken by these countries.

Nepal is facing various problems like poverty, unemployment and Nepal's macroeconomic indicators show declining economic performance. In FY 2005, Nepal's Human Development Indicator is below 0.5, it proved the poverty of Nepal. During the study period, Nepal has to invest a huge amount of expenditure for security, which is not productive. Every year's Budget is more than preceding year's budget but revenue is not increasing in the same pace. Due to this reason, Nepal has to depend upon foreign assistance and external loans. Owing to heavy reliance on external assistance in the form of borrowing in public accounts, Nepal's external public indebtedness has increased in geometric progression. A rise in external indebtedness should be accompanied by an increasing debts servicing capacity. An ever increasing debt without similar increase in debt servicing creates undue strain in the Balance of Payment, because an increasing external debt servicing implies outflow of capital which may lead the country to the heavy burden of debt and debt crisis in the future.

Although foreign loans are main pillars for development process and to break out vicious circle of insufficient domestic capital formation, it has adverse effect on national economy when it's servicing, means that the scarce foreign exchange resources have to be transferred to creditors' countries.

When an external debt service has obvious impact on domestic capital formation and reduces the domestic standard of living, unless the loans are used for financing profitable investment, the whole yield is enough to satisfy creditor's claims for debt servicing, therefore, the true burden of debt service depends on profitable investment. In which the borrowed fund from external sources can be transformed into productive investment. If the foreign loans are used for financing unproductive investment projects that provide present consumption with more goods then foreign debt servicing is impossible.

For the purpose of foreign debt servicing, foreign currency has to be earned through increasing volume of exportable goods and services. If this is not done then the purpose of external loan is not fulfilled and it really becomes burden on next generation. Therefore, it is very essential that the real income of the national economy should grow faster than the transfer of resources through its external debt servicing. This requires ever-growing flow of export trade and proper utilization of foreign loans.

Samuelson (1964) has suggested for use of foreign capital in the process of development of developing countries. He argues, "If there are many difficulties in the way of domestic capital formation, why not rely more heavily on foreign sources". He further said, “Economic theory tells that a rich country has used up all its own high investment projects can benefit itself and at the same time benefit a poor country abroad. If it has shifted investment to the high internal project, it will be benefited to the investor or indebted country.

4.15 External Outstanding Debt and GDP

While discussing on the burden of external debt, it is important to pay attention on the trends of external debt and GDP to make a comparison between the two. This comparison gives the position of external debt in the country’s GDP. This comparison is being made in the following table 4.17.

Table 4.17
Annual Growth of External Outstanding Debt and GDP

(Rs. in million)

Fiscal Year	Total External Outs. Debt	Annual Growth Rate %	GDP at producers price	Annual Growth Rate %	External Debt as % of GDP
2000/01	201550.6	0	441518.5	0	45.6
2001/02	220125.6	9.2	459442.6	4.1	47.9
2002/03	223433.2	1.5	492230.8	7.1	45.4
2003/04	232779.3	4.2	536749.1	9.0	43.4
2004/05	219641.9	-5.6	589411.7	9.8	37.3
2005/06	233968.9	6.5	654084.1	11.0	35.8
2006/07	216628.9	-7.4	727827	11.3	29.8
2007/08	249965.4	15.4	815658.2	12.1	30.6
2008/09	277040.4	10.8	988272	21.2	28.0
2009/10	256243.3	-7.5	1192774	20.7	21.5
2010/11	259551.8	1.3	1366953	14.6	19.0
2011/12	309287.1	19.2	1527344	11.7	20.2
2012/13	333441.5	7.8	1695011	11.0	19.7
2013/14	346819.1	4.0	1964540	15.9	17.7
2014/15	343261.8	-1.0	2120470	7.9	16.2
2015/16R	382527.8	11.4	2248691	6.0	17.0
AAGR	**4.4**	**4.7**	**10.8**	**11.6**	

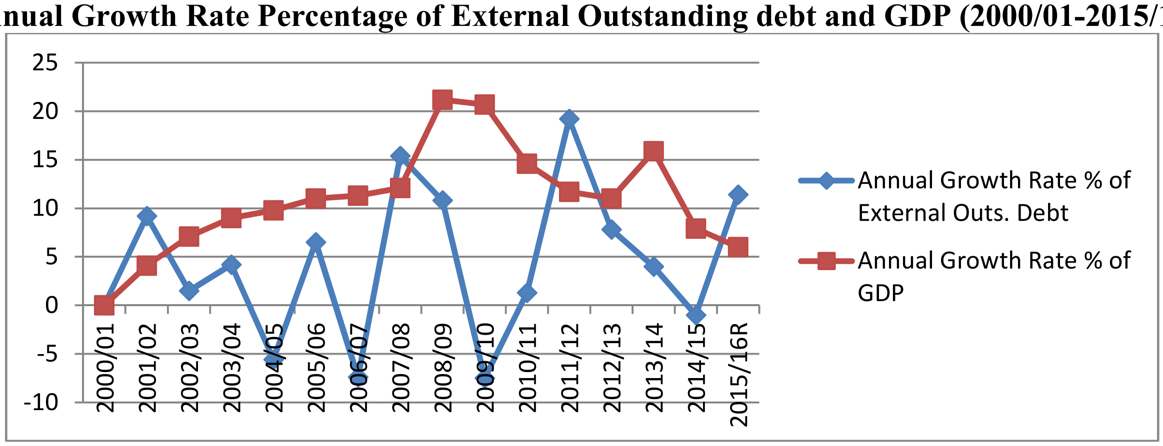
Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 21 and 26

Observing table 4.17, there is increasing trend of growth rate of outstanding external debt and GDP. The amount of external outstanding debt was Rs. 201550.6 million and has gone up to

Rs.382527.8 million in 2015/16. This has increased with 4.7percent of average annual growth rate. Its annual growth rate was 9.2 percent in 2000/01 but thereafter it is declining to -7.5 percent in FY 2009/10 and was by 11.4 percent in 2015/16. But the rate of increase in GDP is diminishing though GDP is increasing. It also shows unsatisfactory economic performance because GDP is a pillar of National economy. Where, GDP has increased from Rs. 441518.5 million in FY 2000/01 to Rs. 2248691.0 million with 11.6percent of average annual growth rate over the review period, which is smaller than growth rate of external outstanding debt. After the restoration of multiparty system, the annual growth rate of GDP is not satisfactory and became 4.1 percent in 2000/01 and again it rose to 6.0 percent in 205/16 in the producers' price.

While comparing the increasing trend of external indebtedness with increase in GDP or external debt to GDP the external debt as percent of GDP was 45.6 percent in 2000/01 and has gone up to 47.9 percent in 2001/02 and 17.00 percent in 2015/16. This shows clearly the burden of external debt was quite loss. Table 4.16 also shows share of external outstanding debt is 45.9 percent to 17.00 till 2015/16 of GDP, which may lead the country to external debt crisis in future. So, external loans have to be used for productive sector or think about proper utilization. Annual growth rate of external outstanding debt and GDP is shown in the graph.

Figure 4.8
Annual Growth Rate Percentage of External Outstanding debt and GDP (2000/01-2015/16)



Source: Self Compiled from Table Number 4.17

4.16 External Debt Flow and Its Annual Servicing

One of the main features of budgetary system in Nepal is deficit budget in which large proportion of it is fulfilled by external loan. This is also proved by the increasing trend of average annual growth rate of external debt by 5.0 percent over the period of the study. Here the ratio of external outstanding debt to GDP has grown up creating adverse situation in the economy, which requires effective measures of control.

Table 4.18
External Debt Flow and Its Servicing

(Rs. in million)

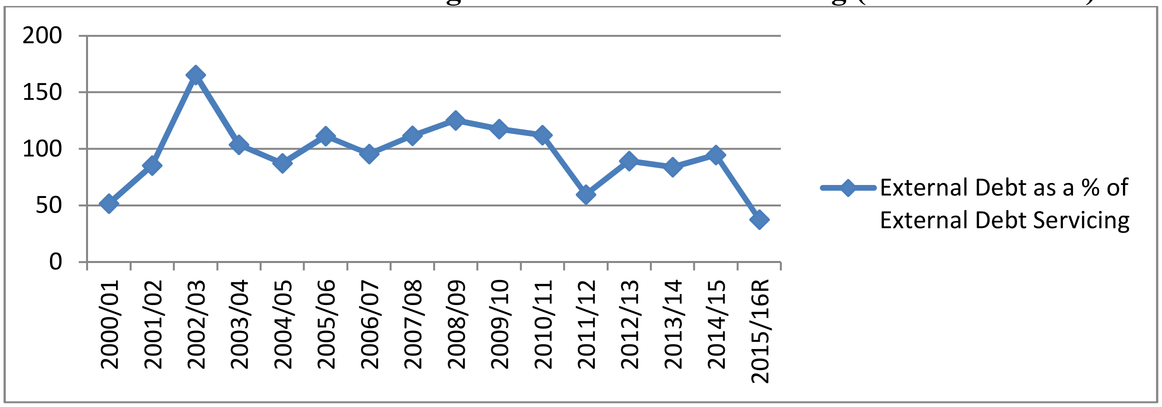
Fiscal Year	External Debt (1)	External Debt Servicing (2)	2 as a % of 1
2000/01	12044.0	6201.40	51.5
2001/02	7698.7	6567.00	85.3
2002/03	4546.4	7518.00	165.4
2003/04	7629.0	7908.00	103.7
2004/05	9266.1	8100.00	87.4
2005/06	8214.3	9151.00	111.4
2006/07	10053.5	9594.51	95.4
2007/08	8979.9	10014.71	111.5
2008/09	9968.9	12493.99	125.3
2009/10	11223.4	13201.08	117.6
2010/11	12075.6	13540.03	112.1
2011/12	11083.1	6594.24	59.5
2012/13	11969.1	10682.33	89.2
2013/14	17998.8	15074.63	83.8
2014/15	25531.3	24159.03	94.6
2015/16R	58611.5	21936.97	37.4
AAGR	**16.6**	**11.6**	

Note: R = Revised Estimates
Source: Adopted and computed from NRB, A Handbook of Government Finance Statistics, Volume V, March 2017, Table no. 1

Table 4.18 shows the comparison between the annual flow of external debt and annual external debt servicing obligations. Here, the new borrowing external debt was Rs. 12044.0 million in 2000/01 and has gone up to Rs. 58611.5 million in 2015/16. The amount of external debt servicing has increased from Rs. 6201.4 million in 2000/01 to Rs. 21936.97 million in 2015/16 with 11.6percent of average annual growth rate during the period of the study. By the table it is clear that, till 2000/01, more than half of new annual external borrowing or 51.5 percent of new borrowing is transferred to the creditor countries to service the external debt per annum. But in FY 2002/03 more than 100percent of external debt servicing is transferred to external debt. It proved that if we use foreign loan in the productive sector then it is possible to repayment and remittance has played a vital role to develop our economy in the current year. Due to need for internal security maintenance, the external debt in the last three years has been increasing at a very high rate. The trend of external debt servicing as percent of external debt is in Figure 4.9.

Figure 4.9

External Debt as a Percentage of External Debt Servicing (2000/01-2015/16)



Source: Self Compiled from Table Number 4.18

4.17 Relationship between GDP and Public Debt in Nepal

To study the trend and pattern of external debt and internal debt on the economic development of Nepal, the present study has used regression equation by using ordinary least-square method. Regression equation is used to analyze the cause and effect relationship between GDP with internal debt (ID) and external debt (ED). In statistical analysis, number in parenthesis below indicates the t values of the coefficients. To identify the validity of regression estimates and the value of the parameters; various statistical tests have been used. On the basis of the values of the parameters, we have analyzed the trend and pattern of external and internal debt on the economic development of Nepal. Regression equation in this chapter is conducted by using SPSS program.

Relationship between GDP and Internal Debt in Nepal

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

$Y = a_0 + a_1X_1$ ……………………..1

Where, Y = GDP (Dependent Variable)

X_1 = Internal Debt (Independent Variable)

a_0, a_1 = Regression parameters

The result of this regression model is:

$Y = 152267.058 + 33.833\ X_1$

(5.722) (14.300)

$R^2 = 0.919$ F-test = 204.479

Interpretation of the result

The fitted equation above shows that there is positive relationship between GDP (Y) and Internal Debt (X_1) which means when Internal Debt increases then GDP increases. The coefficient of determination R^2 is 0.919 which means that 91.9 percent of variation of GDP (Y) is determined by the explanatory variables i.e. Internal Debt. In other words, if we are trying to explain what may effect to GDP. There might be others factors that can explain this variation, but above model which include only Internal Debt can explain 91.9 percent of it. This means that 8.1 percent of the variation in GDP cannot be explained by Internal Debt alone. Therefore, there must be other variables that have an influence also. Similarly, the calculated F-value is 204.479 at 5 percent level of significance which is greater than tabulated F-value 5.27 which implies that the model is statistically very significant. We conclude that there is a significant change in the average GDP of Nepal due to total Internal debt obtained the data from 2000/01 to 2015/16 i.e. the GDP changed in the given periods due to total internal debt.

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

Relationship between GDP and External Debt in Nepal

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

$$Y = a_0 + a_1 X_2 \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 2$$

The result of this regression model is:

$Y = -19202.036 + 50.177 X_2$

-(0.074) (1.797)

$R^2 = 0.152$ F-test = 3.231

Where, Y = GDP (Dependent Variable)

X_2 = External Debt (Independent Variable)

a_0, a_1= Regression parameters

Interpretation of the result

The estimated coefficients of equation (2) have expected sign. Both the coefficients are statistically significant at 5 percent level. The equation itself is good fit, with 15.2 percent of the variations in dependent variable being explained by the independent variable. Hence, the growth in External debt have positive impact over growth of output, this relationship is statistically significant.

Relationship between GDP and Total Debt in Nepal

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

Regression equation Y on X is
$Y = a_0 + a_1 X$ ……. ……………3

Where, Y = GDP (Dependent Variable)
X = Total Debt (Independent Variable)

The result of this equation is:
$Y = -82105.970 + 29.658\ X$
(-1.769) (12.398)
$R^2 = 0.895$ F-test = 153.722

Interpretation of the result

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

4.18 Impact on Economic Growth

To results show that there is positive relationship between public debt and GDP. There should be increased volume of public debt which increases the volume of GDP. The data shows that the increase of total debt will increase the GDP of the country. It is thus concluded that public debt has positive impact upon GDP which helps to improve the economic condition of the country. Government has increased investment in development expenditure but it, still, has less than the regular expenditure. Government has increased the development expenditure in 14.7 percent whereas regular expenditure has only 5.7 percent increment, due to which public debt financing goes positive. With the increased in GDP and public debt, it would help in total debt servicing also. Government has increased its external and internal debt servicing to total debt servicing which was 28.3 percent and 71.8 percent respectively, and increment in total debt servicing was 14 percent. However, continuous dependence on internal and external financing may not be productive and sustainable in the long run, and may not necessarily in the growth of the economy.

CHAPTER 5
SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Public debt is the widely accepted measure for financing government expenditure. It is the loan taken by the government to meet gap between revenue and growing expenditure. Government take the fund from internal and external sources. Nepal is in critical phase of managing public finance because of insufficient internal resources. The fiscal deficit has been increasing in every fiscal year due to the growing of expenditure than collected revenue. To meet the growing expenditure and to fulfill the gap between revenue and expenditure, the government taken the fund from internal and external sources. The government borrows for financing the budgetary deficit and helps to achieve a higher growth rate of the economy. The government expenditure mainly regular expenditure is increasing rapidly but revenue is not increasing in the same ratio. The landlocked nature and mountainous topography are the major constraints for development of Nepal. Economically, Nepal is backward and its economic performance is not satisfactory. Now Nepal is facing an acute resource gap problem which is also being expected to grow in coming years. Nepal is demanding more and more financial resources through public debt to bridge the growing resource gap in the budget.

Government is taking funds from the internal sources in to which treasury bills, special bonds, development bonds and national saving certificates are included. Large portion of internal debt is taken from banking sectors. Similarly, in external sources Nepal is receiving borrowing in the form of bilateral and multilateral sources such as ADB, UNDP, WB, WHO, IMF etc.

For Nepal, both internal and external debt plays a significant role, as a means of financing economic development. Public borrowing has to be undertaken within the country as well as abroad. Only through internal resources, it is not sufficient to promote the rapid development of the Nepalese economy. Thus, external debt financing contributes significantly to the development of Nepal. Now a day, Government collect more fund from internal source than external sources. Data shows that the share of outstanding internal debt in total outstanding debt is more than the external debt.

Nepal is indebted by both internal and external loans. Thus, its proper management has been a challenging task for Nepal. So the government should be responsible to utilize the public debt in productive sector rather than unproductive sectors and general expenditure. The government regulates the better fiscal policy and concern in the proper implementation. Otherwise, Nepal is going to face debt crisis in the future in which debt bearing obligations would become impediments to the balanced management of the economy and international trust of Nepalese policy implementation.

Summary of Major Findings

Some findings are extracted and summarized from this study, which are as follows:

- In the study period from 2000/01 to 2015/16, the government revenue has increased from Rs. 48893.6 million to Rs. 469425.5 million with the average annual growth rate of revenue is 15.5 percent. In the same period, the expenditure has increased from Rs. 79835.1 million to Rs. 701171.7 million with the annual average growth rate of 15.0 percent. But the growth rate of revenue is not sufficient for financing the increased government expenditure.
- The gap between revenue and expenditure was Rs. 30940.5 million in FY 2000/01 and it has increased to Rs. 231746.2 million in FY 2015/16 with the average annual growth rate of gap is 17.3%. The resource gap has been increasing in each year that shows there is excessively increase in government expenditure than government revenue which leads the revenue gap.
- The amount of internal debt was Rs. 7000.0 million in 2000/01 and it has increased to Rs. 88000.0 million in FY 2015/16. Similarly, the amount of external debt was Rs. 12044.0 million in FY 2000/01 and it has increased to Rs. 58611.5 million in FY 2015/16. Percentage share internal debt and external debt in total debt in FY 2000/01 was 36.8 and 63.2 percent respectively. Internal debt has increased to 60.0 percent and external debt has decreased to 40.0 percent. But the average annual growth rate of internal debt is 25.2 and external debt is 16.6 percent. Thus the portion of external debt has been increasing in each fiscal year.
- Total external debt was Rs. 12044.0 million in FY 2000/01 in which Rs. 587.0 million was taken from bilateral and Rs. 11457.0 million from multilateral sources. It has gone up to Rs. 58611.5million in FY 2015/16 in where Rs. 5644.29 million from bilateral and Rs. 52967.21 million from multilateral sources. In the study period the share of bilateral sources is 12.9 percent and share of multilateral sources is 87.1 percent.

- The outstanding internal and external debts in FY 2000/01 were Rs. 60043.8 million and Rs. 201550.6 million and in FY 2015/16 were Rs. 234158.0 million and Rs. 382527.8 million respectively. The annual average growth rate of internal and external debt as percentage of GDP is 13.2 percent and 29.7 percent.
- In FY 2000/01, fiscal deficit was Rs. 24188.0 million which is increased to Rs. 164666.5 million in FY 2015/16. The fiscal deficit is increasing in each fiscal year. The annual average growth rate of deficit is 24.5 percent.
- The total debt servicing was Rs. 10388.40 million in FY 2000/01 which has increased to Rs. 77653.0 million in FY 2015/16. During the period between 2000/01 to 2015/16, the average annual growth rate of total debt servicing as percentage of GDP is 14.0 percent. In that period the average annual share of percentage of internal debt servicing is more than external debt servicing.
- Development expenditure has been increasing in each period of plan. In First Plan development expenditure was Rs. 28307.2 million which is increased to Rs. 159089.2 million in Interim Plan.

5.2 Conclusion

This study has analyzed the trend and pattern of government borrowing on economic development. The government suffering from fiscal deficit since many year because expenditure has increased more rapidly than government income. Due to the limited resources of government income, the government has borrowed from internal and external sources to fulfill the gap between expenditure and revenue. The growing trend of borrowing creates a great problem for debt management and becoming major challenging issue for the country. The borrowing money is unlikely financed on the non-monetized and unproductive sectors of the economy which in turn has the burden for the country.

The degree of the internal debt has been increasing than the external debt, due to the awareness of debt, mobilization of internal resources, policies of central bank for saving, investment saving, utilization of debt in productive sector. So there has been flow of internal loans than external loans to bridge up these gaps. Consequently burden of external debt obligation are decrease rapidly in each year but if country don't utilize that debt in proper way, it create many problem to shift to new external debt again in the future. We has been decreasing to take loan from external source and increasing internal but fiscal deficit and borrowing to fulfill the fiscal deficit has been increasing each year.

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

The study clearly shows the facts that the average annual share of outstanding debt as a percentage of GDP is almost 42.9 percent. It concluded that we are entrapped in the debt net. If debt management is not set effectively and effective programs for debt financing are not carried out we shall not escape from the situation of debt trap.

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

5.3 Recommendations

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

- **Government should maintain fiscal balance by applying strong fiscal and monetary policy.**

  The size of revenue collection is very low and expenditure is very high which creates fiscal imbalance. This has lead to heavy borrowing from internal and external sources. So for reducing the volume of borrowing and maximizing revenue collection government should adopt transparent and effective tax policy by improving tax administration. Government should maintain the strong fiscal discipline. It most set and implements the effective legal system to control the ever-increasing corruption, unnecessary expenses, and improper allocation of resources. This might contribute to control growing unproductive and useless expenses in one side and increased revenue on the other side. Government efforts should be directed towards mobilizing internal resources and thus to reduce dependency on loans for financing development expenditure.

- **Government should maintain balance of payment.**

  Government should invest budget in the development sectors which make to increase the GDP of the country. It helps to develop the country, produce the produce, create employment, increase in export than import the goods, utilization of resources, etc. Positive balance of payment helps the government to collect income from export of produce which decrease the fiscal deficit each year.

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

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

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

  To increase Debt servicing capacity, Government should increase GDP growth, revenue growth and export earnings growth in sustainable path so that country will not trapped on debt servicing problem. Government should be conscious for falling the country into debt trap. To prevent from debt- trap government should create new debt servicing capacity. The inflowing loan should utilized as possible as productive and currency earning areas.

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

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

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